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Funding Costs and Liabilities of Large Corporate Pension Plans

1982 Executive Report

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Introduction

The 1982 *Executive Report on Funding Costs and Liabilities of Large Corporate Pension Plans* is the fifth annual study in a series of reports which examines two questions: (1) What effect does annual pension cost have on the ongoing operations of large corporations; and (2) Are pension plans' funds adequate to pay promised benefits?

As explained in detail in the section on Methodology, our study surveys the annual reports of the Fortune 500 Industrial companies and four Fortune-50 Non-Industrial categories: Commercial banking, retailing, transportation and utilities.

In order to determine the answer to our first inquiry—the impact of pension cost on corporate operations—we compare each company's annual pension expense to three items: pretax profits, the size of the workforce and the level of compensation. (Exhibits 2 through 5)

With respect to our second inquiry—the adequacy of pension funds to pay promised benefits—we examine the relationships between the value of the plans' assets and the value of accumulated plan benefits (both vested and nonvested). Any unfunded amounts are also compared with each company's net worth. (Exhibits 6 through 10)

The 1982 Executive Report differs from prior reports because, for the first time since 1978 (when we published our first survey), we have recalculated the plans' liability for vested accrued benefits on two alternative interest assumptions. Details are presented in section 10 on page 41.

It is important to be aware that pension expense and pension liabilities are not measured by the same yardstick. Pension expense, as shown in a company's annual report, is measured by actuaries on an "ongoing-plan" basis, using long-term assumptions as to future fund earnings and salary growth. The test of pension fund adequacy, on the other hand, is measured under accounting profession standards on something closer to a "plan termination" basis. The Financial Accounting Standards Board (FASB) in its statement Number 36 ("Disclosure of Pension Information"), specifies that the value of accumulated benefits be calculated with no provision for future salary increase, using a "current" interest assumption to discount future plan benefits. The result of these differing measurements is that the pension expense is often determined on a more conservative basis than the value of accumulated benefits. We note here that it is likely there will be changes in reporting required by the FASB in the future. A discussion memorandum was issued last year on the subject of accounting for the cost of pension plans, and preliminary views regarding specific accounting changes have recently been released by the FASB. At issue are such major decisions as whether unfunded pension liabilities should be put on a company's balance sheet, whether the liabilities should include future salary increases and whether all companies should use a common actuarial cost method for pension expense accounting.

The general picture that emerges from our studies is that the average company represented in this report has maintained its financial equilibrium in the wake of the many legislative, economic and social pressures that have come to bear on pension plan sponsors. Of course, if we focus on particular industries and companies (as we do in the Exhibits), we find that there are exceptional industries and companies, both for better and for worse. Despite such variations, the overall results of our survey reveal that pension costs and liabilities of large corporate pension plans are generally well within the financial resources of their sponsors.

Highlights

Time stood still during 1981 with respect to the pension cost disclosed by the average company in our survey. For the first time, we report an average decrease in pension cost for the Fortune 500 Industrials—of 1.1 percent. The Non-Industrial companies in our survey experienced an average increase in pension cost of only 0.9 percent. Total pension dollars for all companies included in the survey for 1981 amounted to $28.9 billion. (See Section Two)

Pension cost amounted to 12.6 percent of pretax profits for the average Industrial company, and 15.5 percent for the average Non-Industrial firm, down slightly from the 1980 ratios of 13.0 and 16.9 percent, respectively. The 1981 and 1980 ratios of pension cost to pretax profits for the Fortune 500 Industrials in this Executive Report remain relatively unchanged from ratios developed in prior Executive Reports, which have ranged from 12.2 to 12.6 percent. (See Section Three)

During 1981, the average company in this report spent $1,416 for each employee's pension, compared to $1,417 during 1980. These amounts equalled about 7.8 percent of the average employee's compensation during 1981, and about 9.2 percent of the average employee's 1980 compensation. The amounts for the Industrials and Non-Industrials, separately, were as follows:

	Industrials		Non-Industrials	
	1981	1980	1981	1980
Average pension cost per employee (See Section Four)	$1,412	$1,421	$1,428	$1,405
Pension cost as a percent of payroll (See Section Five)	7.1%	8.5%	9.8%	11.3%

Of the 627 Industrial and Non-Industrial companies reporting the value of plan benefits, 74 percent were fully funded with respect to total vested benefits. (See Section Six)

On the whole, the average company in our survey was nearly as funded with respect to total accumulated benefits as it was with respect to total vested benefits, as shown below. (See Sections Six and Seven)

	Total Vested Benefits	Total Accumulated Benefits
Industrial	93.9%	89.4%
Non-Industrial	97.5%	96.4%
All Companies	94.7%	91.0%

Unfunded vested benefits amounted to less than two percent of net worth for the average company in our survey. Only 9 of the 625 companies surveyed have unfunded vested benefits in excess of 30 percent of their net worth. (See Section Eight)

Unfunded total accumulated benefits amounted to less than three percent of net worth; and only 11 of the 625 companies surveyed had unfunded total accumulated benefits in excess of 30 percent of net worth. (See Section Nine)

Almost 70 percent of the companies were fully funded even after an adjustment was made to each company's value of total vested benefits in order to estimate the benefits' value on a uniform seven percent interest assumption. Close to 94 percent of the companies were fully funded after a similar adjustment to their reported value of total vested benefits that estimated the benefits' value on a uniform ten percent interest assumption, the approximate rate that would have been applied by the Pension Benefit Guaranty Corporation to a plan that terminated at the end of 1981. (See Section Ten)

The most frequently reported FASB interest rates for 1981 were 7 and 8 percent, while for 1980 the most frequently reported values were 6 and 7 percent. (See Appendix)

Conclusion

The answer to our first inquiry—how pension cost affects ongoing operations—remains unchanged from former Executive Reports. The annual pension cost for the average company in our survey was roughly one eighth of its pretax profits. There continue to be a few financially troubled companies that could cause an intolerable burden for the Pension Benefit Guaranty Corporation (PBGC) were their pension plans to be terminated, although it is hoped that this will be averted by a revitalized national economy.

Upon examination of the question of the ability of large corporate pension plans to pay promised benefits, the shape of pension plan finances appears better than ever. According to the figures shown by each company in its annual report for the value of vested benefits under FASB Statement Number 36 (as described in the Introduction), 74 percent had sufficient assets to fully fund the value of total vested benefits. In last year's Executive Report, only 62 percent of the companies disclosing FASB data were fully funded with respect to total vested benefits. However, because the magnitude of a plan's unfunded liability, if any, is very sensitive to the interest rate at which future fund earnings are calculated, we have estimated the unfunded liabilities that would result under two alternative interest rate assumptions for each of the companies surveyed.

Using actuarial approximating techniques, we adjusted each company's reported value of vested benefits, based on the FASB Statement Number 36 interest rate disclosed, in order to estimate the value of the benefits on a uniform seven percent and on a uniform ten percent interest assumption basis. We then compared each of these adjusted values to the value of disclosed assets for each company in order to determine the unfunded vested liability, if any, for each company.

The seven percent interest rate value was selected because it was the most frequently disclosed FASB Statement Number 36 interest rate below the overall average of 7.6 percent. The ten percent interest rate represents the approximate rate that would have been applied by the Pension Benefit Guaranty Corporation in the event of a plan termination on December 31, 1981.

At the lower rate of seven percent, a rate frequently adopted by actuaries as a conservative estimate of anticipated long-range earnings under a plan, 70 percent of the surveyed companies could still fully fund their vested pension obligations with the value of their plan assets. At the higher rate of 10 percent, only 6 percent of the surveyed companies could *not* so cover their vested benefits.

Method

Data was extracted from each company's annual report to shareholders for the fiscal year ending within the period from April 1, 1981 to March 31, 1982. Whenever possible, annual pension cost figures represent contributions to only qualified domestic defined-benefit pension plans and to multiemployer plans. The figures shown for vested benefits and total accumulated benefits nearly always represent only domestic defined-benefit plans, since FASB Statement Number 36 does not require actuarial information with respect to plan benefits to be determined or reported for other types of plans. Information that is not shown in a company's annual report but is available from Fortune magazine (e.g., number of employees) was taken from Fortune.

Companies included in the survey are the Fortune 500 Largest Industrials and the four Fortune Non-Industrial categories of 50 Largest Commercial Banking Companies, 50 Largest Retailing Companies, 50 Largest Transportation Companies, and 50 Largest Utilities. Unless otherwise specified, references in the text to the "Industrial" and the "Non-Industrial" companies cover only those companies for which data is presented in the corresponding Exhibit. For all but one Exhibit, data is also provided by industry group as categorized by the U.S. Office of Management and Budget. A particular company's identification with one of the industry groups is determined on the basis of the information presented by Fortune.

Figures in the Exhibits for both 1981 and 1980 were taken from the annual report to shareholders (or Fortune) as described earlier. In many cases, a company restates amounts attributable to previous years, hence statistics shown for 1980 in the 1982 Executive Report supercede those shown for 1980 in the 1981 Executive Report. Figures in the text may refer to years prior to 1980, in which case the figures were taken from previous Executive Reports. Since the number of companies included in the survey changes from year to year, comparison of dollars and percentages with previous years is not exact.

1.

"Ninety-two percent of the Fortune 500 companies are represented in this study."

Number of Companies Surveyed, 1981

Ninety-one percent of the 700 companies in the Fortune categories that we surveyed are represented in this report. Of the 66 companies that are not represented, 23 companies did not maintain a defined-benefit plan, and 15 companies were either foreign-owned or were merged with another Fortune company. The remainder, 28, were not included because annual reports could not be obtained, or because the pension data could not be used due to bankruptcy proceedings, a change in the fiscal or plan year, the adoption of a new plan, or some similar problem.

An alphabetical list of the 634 companies included in the study is shown in the Appendix.

Exhibit 1

Survey Participants, 1981

		Number of Companies in Fortune Universe	Number of Companies in J&H Survey	Percent of Fortune-Ranked Companies in J&H Survey
By Fortune 500 Industrial Group				
Fortune 1-100		100	97	97%
Fortune 101-200		100	98	98%
Fortune 201-300		100	91	91%
Fortune 301-400		100	88	88%
Fortune 401-500		100	87	87%
	Total	500	461	92%
By Industry Group				
Mining, crude oil production		9	9	100%
Food		50	46	92%
Tobacco		5	4	80%
Textiles, vinyl flooring		13	13	100%
Apparel		10	9	90%
Furniture		1	1	100%
Paper, fiber, and wood products		34	30	88%
Publishing, printing		15	14	93%
Chemicals		43	38	88%
Petroleum refining		41	38	93%
Rubber, plastic products		8	8	100%
Leather		1	1	100%
Glass, concrete, abrasives, gypsum		15	15	100%
Metal manufacturing		38	35	92%
Metal products		26	24	92%
Electronics, Appliances		38	32	84%
Shipbuilding, Railrd., trans. equip.		7	7	100%
Measuring, scient., photo equip.		17	17	100%
Motor vehicles		16	16	100%
Aerospace		15	15	100%
Pharmaceuticals		18	17	94%
Soaps, cosmetics		8	6	75%
Office equip. (incl. computers)		11	9	82%
Industrial & farm equipment		44	42	95%
Music instr., toys, sporting goods		5	4	80%
Beverages		12	11	92%
By Fortune 50 Non-Industrial Groups				
Commercial banking		50	47	94%
Retailing		50	38	76%
Transportation		50	40	80%
Utilities		50	48	96%
	Total	200	173	87%

2.

"Roughly, $29 billion was allocated to annual pension expense for each of the past two years."

Change in Pension Cost, 1981 from 1980

Last year's Executive Report showed the smallest increase in pension cost (10.1 percent for the Industrials) since our first published survey in 1978. This year we report the first actual decrease in the level of average Industrial pension cost, although a very small decrease—of 1.1 percent. As you can see from Exhibit 2 on pages 10 and 11, most of this average decrease is attributable to the large corporations in the Fortune 1-100 group of companies, whose aggregate dollars spent on pensions outweighs those of the smaller companies. In particular, the motor vehicles group posted the largest decrease—over 12 percent. Even so, this group continued to spend an average of $200 million per company on pensions for 1981.

Twenty Industrial and Non-Industrial companies in our survey experienced an increase in pension expense of over 50 percent from 1980 to 1981. This is attributable, in some cases, to the effect of a merger or acquisition, the adoption of an additional plan, or a major change to a plan, e.g., the elimination of employee contributions. Interestingly, the only industry groups with double-digit average increases in pension cost from 1980 to 1981 were those related to personal items: apparel (including leather) and cigarettes.

The absence of any significant increase in average pension cost over the year was attributable in part to the reduced employment levels that we reported in last year's Executive Report. Other possible factors were the generally favorable 1980 investment experience and, for many companies, changes in actuarial assumptions, e.g., the use of a higher interest rate.

The deflation of average pension cost probably reflects the severity of the budget restrictions faced by the typical corporation in our survey. However, statutory safeguards in the form of minimum funding requirements ensure the safety of the companies' future pension obligations.

Change in Pension Cost 1981 from 1980

Fortune 500 Companies
Average Change: −1.1%

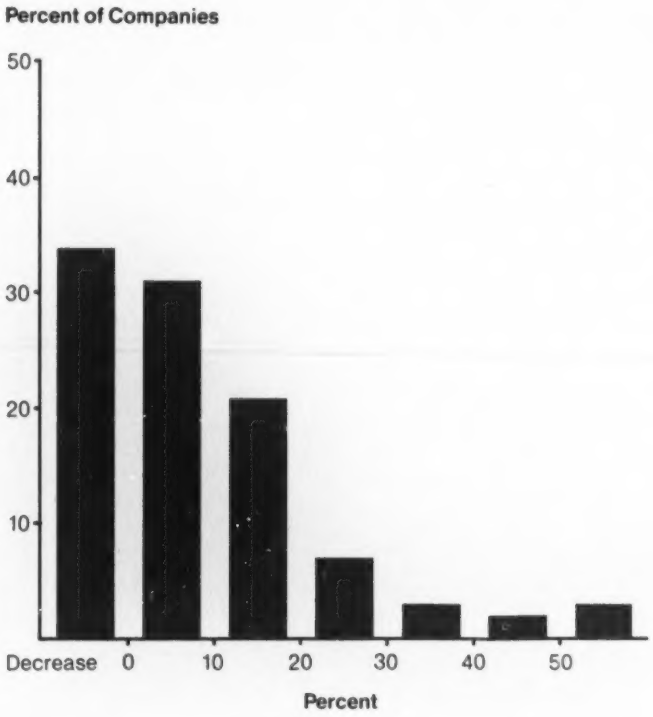

Exhibit 2

Change in Pension Cost, 1981 from 1980

By Fortune 500 Industrial Group		Number of Companies	1981 Pension Cost ($ Millions)	1980 Pension Cost ($ Millions)	Average Change
Fortune 1-100		97	$14,725.6	$15,130.7	
Fortune 101-200		98	3,189.6	3,117.0	
Fortune 201-300		91	1,509.1	1,430.1	
Fortune 301-400		88	877.6	860.2	
Fortune 401-500		87	500.1	494.0	
	Total	461	$20,802.0	$21,032.0	
Industry Group					
Mining, crude oil production		9	$ 110.1	$ 111.9	
Food		46	895.4	871.3	
Tobacco		4	246.8	222.5	
Textiles, vinyl flooring		13	109.5	110.2	
Apparel		9	88.4	80.2	
Furniture		1	2.0	2.2	
Paper, fiber, and wood products		30	562.0	601.3	
Publishing, printing		14	182.7	175.2	
Chemicals		38	1,495.3	1,493.5	
Petroleum refining		38	2,484.4	2,608.4	
Rubber, plastic products		8	372.5	399.1	
Leather		1	9.0	8.0	
Glass, concrete, abrasives, gypsum		15	368.0	348.8	
Metal manufacturing		35	2,027.1	1,901.7	
Metal products		24	587.9	554.6	
Electronics, appliances		32	2,238.9	2,200.9	
Shipbuilding, railrd., trans. equip.		7	124.7	115.7	
Measuring, scient., photo equip.		17	850.8	832.7	
Motor vehicles		16	3,257.4	3,740.7	
Aerospace		15	1,365.9	1,288.4	
Pharmaceuticals		17	454.5	420.8	
Soaps, cosmetics		6	115.3	109.7	
Office equip. (incl. computers)		9	1,458.1	1,496.6	
Industrial & farm equipment		42	1,170.4	1,114.6	
Music instr., toys, sporting goods		4	27.5	29.0	
Beverages		11	197.4	194.0	
Fortune 50 Non-industrial Groups					
Commercial banking		47	$ 514.3	$ 511.2	
Retailing		38	1,006.0	972.6	
Transportation		40	1,661.0	1,574.6	
Utilities		48	4,878.4	4,928.2	
	Total	173	8,059.7	7,986.6	

Number of Companies (Percent of Sample)							Average Cost Per Company ($ Millions)	
Decrease	Increase of 0-9.9%	Increase of 10-19.9%	Increase of 20-29.9%	Increase of 30-39.9%	Increase of 40-49.9%	Increase of 50% or More	1981	1980
42 (43%)	24 (25%)	20 (21%)	5 (5%)	1 (1%)	3 (3%)	2 (2%)		$156.0
42 (43%)	20 (20%)	19 (19%)	8 (8%)	3 (3%)	3 (3%)	3 (3%)		31.8
23 (25%)	38 (42%)	17 (19%)	8 (9%)	2 (2%)	1 (1%)	2 (2%)		15.7
22 (25%)	34 (39%)	17 (19%)	6 (7%)	6 (7%)	0 (0%)	3 (3%)		9.8
26 (30%)	27 (31%)	25 (29%)	3 (3%)	2 (2%)	0 (0%)	4 (5%)		5.7
155 (34%)	143 (31%)	98 (21%)	30 (7%)	14 (3%)	7 (2%)	14 (3%)		$ 45.6
2 (22%)	2 (22%)	2 (22%)	1 (11%)	1 (11%)	0 (0%)	1 (11%)		$ 12.4
17 (37%)	13 (28%)	8 (17%)	5 (11%)	0 (0%)	3 (7%)	0 (0%)		18.9
1 (25%)	0 (0%)	2 (50%)	0 (0%)	1 (25%)	0 (0%)	0 (0%)		55.6
5 (38%)	5 (38%)	2 (15%)	0 (0%)	1 (8%)	0 (0%)	0 (0%)		8.5
2 (22%)	1 (11%)	5 (56%)	0 (0%)	0 (0%)	0 (0%)	1 (11%)		8.9
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		2.2
13 (43%)	12 (40%)	4 (13%)	0 (0%)	0 (0%)	0 (0%)	1 (3%)		20.0
3 (21%)	7 (50%)	4 (29%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		12.5
13 (34%)	12 (32%)	7 (18%)	4 (11%)	2 (5%)	0 (0%)	0 (0%)		39.3
16 (42%)	9 (24%)	6 (16%)	3 (8%)	0 (0%)	1 (3%)	3 (8%)		68.6
4 (50%)	2 (25%)	2 (25%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		49.9
0 (0%)	0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		8.0
2 (13%)	7 (47%)	5 (33%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)		23.3
11 (31%)	15 (43%)	5 (14%)	4 (11%)	0 (0%)	0 (0%)	0 (0%)		54.3
8 (33%)	6 (25%)	7 (29%)	2 (8%)	1 (4%)	0 (0%)	0 (0%)		23.1
11 (34%)	6 (19%)	9 (28%)	0 (0%)	1 (3%)	1 (3%)	4 (13%)		68.8
1 (14%)	2 (29%)	1 (14%)	1 (14%)	0 (0%)	1 (14%)	1 (14%)		16.5
6 (35%)	8 (47%)	1 (6%)	2 (12%)	0 (0%)	0 (0%)	0 (0%)		49.0
6 (38%)	7 (44%)	2 (13%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)		233.8
5 (33%)	5 (33%)	2 (13%)	3 (20%)	0 (0%)	0 (0%)	0 (0%)		85.9
7 (41%)	3 (18%)	4 (24%)	1 (6%)	1 (6%)	1 (6%)	0 (0%)		24.8
3 (50%)	0 (0%)	1 (17%)	1 (17%)	1 (17%)	0 (0%)	0 (0%)		18.3
4 (44%)	1 (11%)	1 (11%)	0 (0%)	2 (22%)	0 (0%)	1 (11%)		166.3
10 (24%)	12 (29%)	14 (33%)	1 (2%)	3 (7%)	0 (0%)	2 (5%)		26.5
1 (25%)	2 (50%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		7.3
3 (27%)	6 (55%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		17.6
16 (34%)	11 (23%)	12 (26%)	6 (13%)	0 (0%)	2 (4%)	0 (0%)		10.9
12 (32%)	14 (37%)	9 (24%)	1 (3%)	0 (0%)	0 (0%)	2 (5%)		25.6
9 (23%)	7 (18%)	14 (35%)	5 (13%)	1 (3%)	1 (3%)	3 (8%)		39.4
11 (23%)	12 (25%)	15 (31%)	5 (10%)	2 (4%)	2 (4%)	1 (2%)		102.7
48 (28%)	44 (25%)	50 (29%)	17 (10%)	3 (2%)	5 (3%)	6 (3%)		46.2

3.

"Pension cost as a percent of pretax profits remains relatively unchanged from year to year."

Pension Cost as a Percent of Pretax Profits, 1981 and 1980

Exhibit 3 on pages 14 and 15 illustrates the effect that pension cost had on the pretax profits of the companies in our survey. Because contributions to a qualified plan are deductible for income tax purposes, we have added the pension cost figure shown by each company back into its reported pretax profits figure. Thus, we examine pension cost as a percent of pretax profits before deduction of pension expense.

The small decrease of 0.4 percent in the average Industrial ratio of pension cost to pretax profits from 1980 to 1981 is the result of the average decrease in pension cost noted for these companies in Section 2, combined with a modest growth in pretax profits for the same period. As in prior Executive Reports, this particular ratio displays remarkable resistance to change: Since our first Executive Report was published in 1978, the Industrials' ratio has always fallen within the 12 to 13 percent range.

The Non-Industrial companies have had pension cost range from 13.2 percent to 16.9 percent of pretax profits in the post-1978 Executive Reports. As you can see from Exhibit 3, that highwater mark of 16.9 percent represents 1980 pension cost as a percent of 1980 pretax profits for the Non-Industrial companies; for 1981 the ratio declined to 15.5 percent. (Note: The ratio for 1980 differs from that shown in last year's Executive Report for two reasons: (1) the universe of companies is not exactly the same, and (2) some companies reported restated financial figures for 1980 in their 1981 Annual Reports.)

The average company in our survey can pay its pension cost with about one and one-half month's worth of 1981 pretax profits, assuming profits emerge pro-rata over the year.

The motor vehicles industry had the highest pension cost-to-pretax profits ratio, 143.6 percent, and was the only industry group over 100 percent. This is the result of yet another troubled year for the automobile industry.

On the whole, it appears that defined-benefit pension plan expense is a normal cost of doing business that will rise and fall with economic cycles in a similar manner to the other costs of the company. We continue to believe that private pension plans are alive and well-managed, and living in the American tradition.

Pension Cost as a Percent of Pretax Profits, 1981 and 1980

Fortune 500 Companies
1981 Average: 12.6%
1980 Average: 13.0%

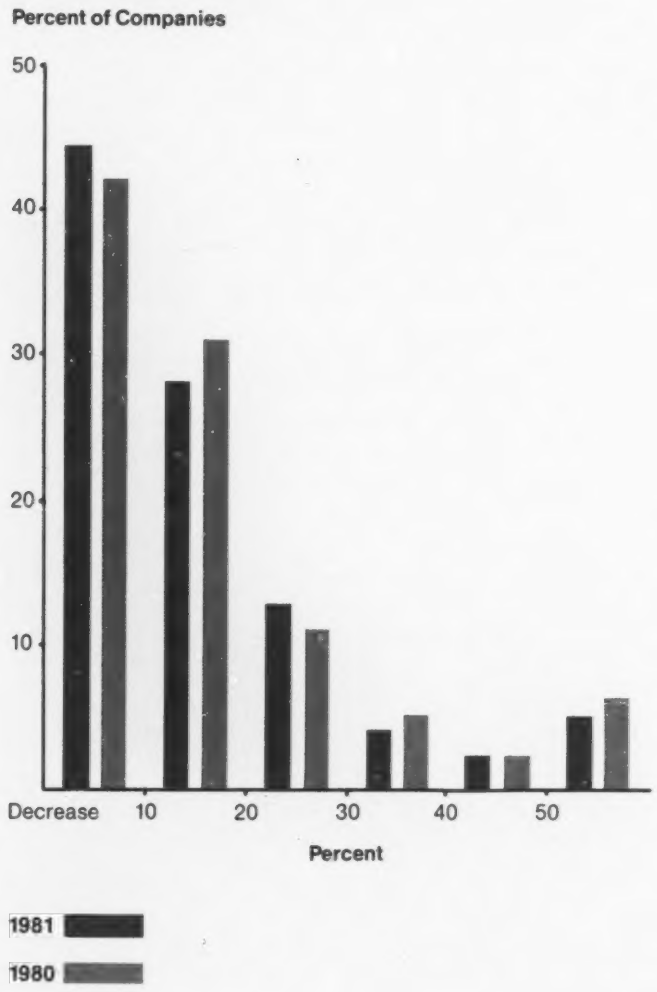

Exhibit 3

Pension Cost as a Percent of Pretax Profits, 1981 from 1980

By Fortune 500 Rank	Number of Companies	Pension Cost as a Percent of Pretax Profits (Average) 1981	1980	.1%-9.9% 1981	.1%-9.9% 1980	10%-19.9% 1981	10%-19.9% 1980
Fortune 1-100	97	[illegible]	13.3%	39 (40%)	42 (43%)	23 (24%)	24 (25%)
Fortune 101-200	98	[illegible]	12.6%	44 (45%)	40 (41%)	27 (28%)	32 (33%)
Fortune 201-300	91	[illegible]	11.5%	44 (48%)	43 (47%)	26 (29%)	34 (37%)
Fortune 301-400	88	[illegible]	12.6%	38 (43%)	32 (36%)	27 (31%)	31 (35%)
Fortune 401-500	87	[illegible]	13.1%	37 (43%)	38 (44%)	27 (31%)	23 (26%)
Total	461	[illegible]	13.0%	202 (44%)	195 (42%)	130 (28%)	144 (31%)
By Industry							
Mining, crude oil production	9	[illegible]	2.4%	7 (78%)	7 (78%)	1 (11%)	1 (11%)
Food	46	[illegible]	11.7%	23 (50%)	21 (46%)	13 (28%)	15 (33%)
Tobacco	4	[illegible]	7.4%	3 (75%)	3 (75%)	1 (25%)	1 (25%)
Textiles, vinyl flooring	13	[illegible]	16.3%	6 (46%)	5 (38%)	3 (23%)	4 (31%)
Apparel	9	[illegible]	7.8%	5 (56%)	5 (56%)	3 (33%)	1 (11%)
Furniture	1	[illegible]	84.6%	1 (100%)	0 (0%)	0 (0%)	0 (0%)
Paper, fiber, and wood products	30	[illegible]	12.6%	10 (33%)	11 (37%)	12 (40%)	14 (47%)
Publishing, printing	14	[illegible]	8.9%	9 (64%)	8 (57%)	4 (29%)	5 (36%)
Chemicals	38	[illegible]	13.9%	20 (53%)	18 (47%)	15 (39%)	14 (37%)
Petroleum refining	38	[illegible]	4.1%	29 (76%)	32 (84%)	2 (5%)	3 (8%)
Rubber, plastic products	8	[illegible]	58.0%	0 (0%)	0 (0%)	2 (25%)	0 (0%)
Leather	1	[illegible]	9.2%	1 (100%)	1 (100%)	0 (0%)	0 (0%)
Glass, concrete, abrasive, gypsum	15	[illegible]	21.1%	1 (7%)	4 (27%)	5 (33%)	3 (20%)
Metal manufacturing	35	[illegible]	28.1%	9 (26%)	9 (26%)	7 (20%)	6 (17%)
Metal products	24	[illegible]	16.8%	9 (38%)	7 (29%)	9 (38%)	14 (58%)
Electronics, appliances	32	[illegible]	17.9%	13 (41%)	13 (41%)	8 (25%)	9 (28%)
Shipbuilding, railrd., trans. equip.	7	[illegible]	15.4%	1 (14%)	1 (14%)	4 (57%)	4 (57%)
Measuring, scient., photo equip.	17	[illegible]	11.9%	9 (53%)	9 (53%)	7 (41%)	7 (41%)
Motor vehicles	16	[illegible]	378.3%	1 (6%)	1 (6%)	2 (13%)	2 (13%)
Aerospace	15	[illegible]	25.3%	1 (7%)	1 (7%)	6 (40%)	6 (40%)
Pharmaceuticals	17	[illegible]	6.4%	14 (82%)	14 (82%)	1 (6%)	3 (18%)
Soaps, Cosmetics	6	[illegible]	7.1%	5 (83%)	5 (83%)	1 (17%)	1 (17%)
Office equip. (incl. computers)	9	[illegible]	15.4%	3 (33%)	3 (33%)	4 (44%)	5 (56%)
Industrial & farm equipment	42	[illegible]	16.6%	12 (29%)	9 (21%)	17 (40%)	22 (52%)
Music inst., toys, sportg. goods	4	[illegible]	12.0%	2 (50%)	1 (25%)	2 (50%)	1 (25%)
Beverages	11	[illegible]	7.7%	8 (73%)	7 (64%)	1 (9%)	3 (27%)
Fortune 50 Non-Industrials							
Commerical banking	47	[illegible]	6.1%	38 (81%)	41 (87%)	8 (17%)	4 (9%)
Retailing	38	[illegible]	16.7%	20 (53%)	18 (47%)	7 (18%)	9 (24%)
Transportation	40	[illegible]	33.4%	11 (28%)	12 (30%)	5 (13%)	4 (10%)
Utilities	48	[illegible]	17.4%	37 (77%)	33 (69%)	9 (19%)	12 (25%)
Total	173	[illegible]	16.9%	106 (61%)	104 (60%)	29 (17%)	29 (17%)

Number of Companies (Percent of Sample)

20%-29.9%		30%-39.9%		40%-49.9%		At Least 50%		Company Had Pretax Loss; Percent Not Calculable		Companies where Pension Cost as a Percent of Pretax Profits		
1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	Increased 1981	Decreased 1981	No Change 1981
19(20%)	12(12%)	5(5%)	7(7%)	3(3%)	2(2%)	4(4%)	6(6%)	4(4%)	4(4%)	43(44%)	45(46%)	4(4%)
12(12%)	9(9%)	5(5%)	9(9%)	3(3%)	3(3%)	4(4%)	4(4%)	3(3%)	1(1%)	37(38%)	55(56%)	3(3%)
12(13%)	9(10%)	2(2%)	0(0%)	2(2%)	2(2%)	4(4%)	3(3%)	1(1%)	0(0%)	45(49%)	42(46%)	3(3%)
7(8%)	11(13%)	4(5%)	6(7%)	3(3%)	1(1%)	3(3%)	6(7%)	6(7%)	1(1%)	41(47%)	38(43%)	2(2%)
11(13%)	10(11%)	3(3%)	2(2%)	0(0%)	2(2%)	6(7%)	9(10%)	3(3%)	3(3%)	32(37%)	46(53%)	3(3%)
61(13%)	51(11%)	19(4%)	24(5%)	11(2%)	10(2%)	21(5%)	28(6%)	17(4%)	9(2%)	198(43%)	226(49%)	15(3%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(11%)	1(11%)	0(0%)	0(0%)	5(56%)	3(33%)	1(11%)
5(11%)	6(13%)	1(2%)	0(0%)	0(0%)	1(2%)	2(4%)	3(7%)	2(4%)	0(0%)	12(26%)	32(70%)	0(0%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	2(50%)	1(25%)	1(25%)
1(8%)	1(8%)	0(0%)	0(0%)	0(0%)	1(8%)	2(15%)	1(8%)	1(8%)	1(8%)	4(31%)	6(46%)	1(8%)
0(0%)	1(11%)	0(0%)	1(11%)	0(0%)	0(0%)	1(11%)	1(11%)	0(0%)	0(0%)	4(44%)	5(56%)	0(0%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(100%)	0(0%)	0(0%)	0(0%)	1(100%)	0(0%)
6(20%)	4(13%)	0(0%)	1(3%)	1(3%)	0(0%)	0(0%)	0(0%)	1(3%)	0(0%)	17(57%)	11(37%)	1(3%)
1(7%)	1(7%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	4(29%)	9(64%)	1(7%)
3(8%)	2(5%)	0(0%)	4(11%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	17(45%)	21(55%)	0(0%)
2(5%)	1(3%)	0(0%)	0(0%)	0(0%)	0(0%)	1(3%)	2(5%)	4(11%)	0(0%)	23(61%)	10(26%)	1(3%)
3(38%)	2(25%)	2(25%)	1(13%)	0(0%)	1(13%)	1(13%)	2(25%)	0(0%)	2(25%)	1(13%)	5(63%)	0(0%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(100%)	0(0%)
3(20%)	3(20%)	1(7%)	2(13%)	3(20%)	2(13%)	1(7%)	1(7%)	1(7%)	0(0%)	10(67%)	3(20%)	1(7%)
7(20%)	9(26%)	5(14%)	1(3%)	3(9%)	3(9%)	4(11%)	7(20%)	0(0%)	0(0%)	13(37%)	20(57%)	2(6%)
4(17%)	2(8%)	1(4%)	0(0%)	1(4%)	1(4%)	0(0%)	0(0%)	0(0%)	0(0%)	12(50%)	11(46%)	1(4%)
7(22%)	6(19%)	2(6%)	3(9%)	0(0%)	1(3%)	1(3%)	0(0%)	1(3%)	0(0%)	17(53%)	12(38%)	2(6%)
1(14%)	2(29%)	0(0%)	0(0%)	1(14%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	5(71%)	2(29%)	0(0%)
0(0%)	1(6%)	1(6%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	7(41%)	10(59%)	0(0%)
6(38%)	3(19%)	0(0%)	3(19%)	1(6%)	0(0%)	2(13%)	2(13%)	4(25%)	5(31%)	4(25%)	7(44%)	0(0%)
2(13%)	2(13%)	2(13%)	3(20%)	1(7%)	0(0%)	3(20%)	3(20%)	0(0%)	0(0%)	9(60%)	6(40%)	0(0%)
1(6%)	0(0%)	1(6%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	8(47%)	9(53%)	0(0%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	3(50%)	2(33%)	1(17%)
2(22%)	0(0%)	0(0%)	1(11%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	6(67%)	3(33%)	0(0%)
7(17%)	4(10%)	3(7%)	3(7%)	0(0%)	0(0%)	2(5%)	3(7%)	1(2%)	1(2%)	14(33%)	25(60%)	1(2%)
0(0%)	1(25%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(25%)	0(0%)	0(0%)	0(0%)	4(100%)	0(0%)
0(0%)	0(0%)	0(0%)	1(9%)	0(0%)	0(0%)	0(0%)	0(0%)	2(18%)	0(0%)	1(9%)	7(64%)	1(9%)
0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	1(2%)	1(2%)	1(2%)	21(45%)	24(51%)	1(2%)
4(11%)	4(11%)	3(8%)	4(11%)	1(3%)	1(3%)	2(5%)	2(5%)	1(3%)	0(0%)	14(37%)	22(58%)	1(3%)
7(18%)	6(15%)	2(5%)	2(5%)	1(3%)	3(8%)	7(18%)	7(18%)	7(18%)	6(15%)	14(35%)	17(43%)	0(0%)
1(2%)	2(4%)	0(0%)	0(0%)	0(0%)	1(2%)	1(2%)	0(0%)	0(0%)	0(0%)	16(33%)	31(65%)	1(2%)
12(7%)	12(7%)	5(3%)	6(3%)	2(1%)	5(3%)	10(6%)	10(6%)	9(5%)	7(4%)	65(38%)	94(54%)	3(2%)

4.

"Plans in our survey covered over 14 million workers."

Change in Pension Cost per Employee, 1981 from 1980

Because both pension cost and the average number of employees declined for the average company during 1981, the net change in pension cost per employee showed little change over 1981. The slightly faster rate of decrease with respect to Industrial pension cost created a slight decrease of under one percent in the pension cost per employee figure for the Industrials, while the Non-Industrials experienced a slight increase in the ratio.

Please note that the number of employees shown in a company's annual report usually includes all employees of the firm, not just those that are participants in the pension plan(s). The reported number of employees might also include foreign employees, who might be covered under foreign pension plans, the cost of which may or may not have been included in the pension cost shown in the annual reports (whenever possible we include the cost of domestic plans only).

Change in Pension Cost per Employee, 1981 from 1980

Fortune 500 Companies
Average Change: —0.6%

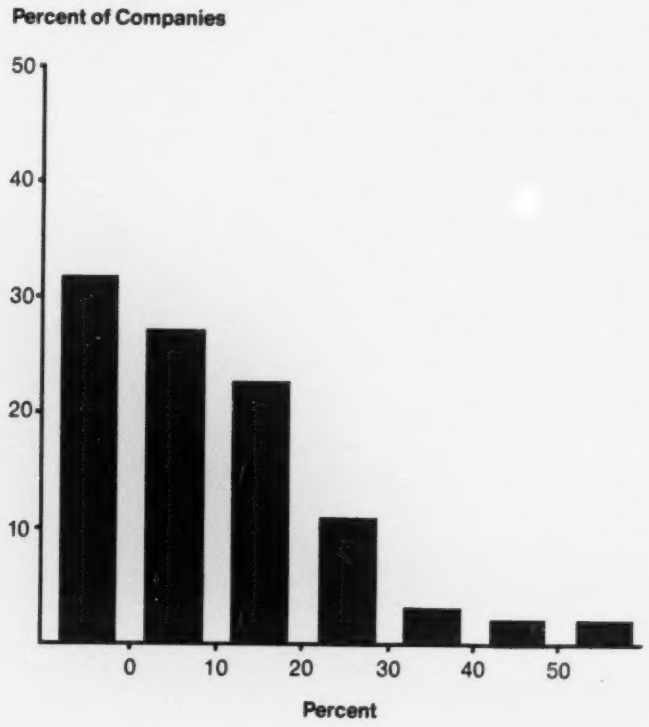

Exhibit 4

Change in Pension Cost per Employee, 1981 from 1980

By Fortune 500 Industrial Group	Number of Companies	Average Change per Employee	Decrease
Fortune 1-100	97	[illegible]	40 (41%)
Fortune 101-200	97	2.7%	34 (35%)
Fortune 201-300	86	[illegible]	20 (23%)
Fortune 301-400	87	[illegible]	19 (22%)
Fortune 401-500	87	[illegible]	32 (37%)
Total	454	[illegible]	145 (32%)
Industry Group			
Mining, crude oil production	8	[illegible]	3 (38%)
Food	45	[illegible]	17 (38%)
Tobacco	4	[illegible]	1 (25%)
Textiles, vinyl flooring	13	[illegible]	5 (38%)
Apparel	9	[illegible]	1 (11%)
Furniture	1	[illegible]	0 (0%)
Paper, fiber, and wood products	30	[illegible]	12 (40%)
Publishing, printing	14	[illegible]	4 (29%)
Chemicals	38	[illegible]	13 (34%)
Petroleum refining	37	[illegible]	19 (51%)
Rubber, plastic products	8	[illegible]	2 (25%)
Leather	1	[illegible]	0 (0%)
Glass, concrete, abrasives, gypsum	15	[illegible]	2 (13%)
Metal manufacturing	34	[illegible]	8 (24%)
Metal products	23	[illegible]	7 (30%)
Electronics, appliances	31	[illegible]	11 (35%)
Shipbuilding, railrd., trans. equip.	7	[illegible]	0 (0%)
Measuring, scient., photo equip.	17	[illegible]	7 (41%)
Motor vehicles	16	[illegible]	5 (31%)
Aerospace	15	[illegible]	3 (20%)
Pharmaceuticals	17	[illegible]	6 (35%)
Soaps, cosmetics	6	[illegible]	1 (17%)
Office equip. (incl. computers)	9	[illegible]	3 (33%)
Industrial & farm equipment	42	[illegible]	10 (24%)
Music instr., toys, sporting goods	4	[illegible]	2 (50%)
Beverages	10	[illegible]	3 (30%)
Fortune 50 Non-Industrial Groups			
Commercial banking	45	[illegible]	25 (56%)
Retailing	34	[illegible]	12 (35%)
Transportation	38	[illegible]	11 (29%)
Utilities	46	[illegible]	15 (33%)
Total	163	[illegible]	63 (39%)

Number of Companies (Percent of Sample)						Average Cost per Employee (in Dollars)	
Increase of 0-9.9%	Increase of 10-19.9%	Increase of 20-29.9%	Increase of 30-39.9%	Increase of 40-49.9%	Increase of 50% or More	1981	1980
21 (22%)	20 (21%)	10 (10%)	2 (2%)	3 (3%)	1 (1%)		$1,792
23 (24%)	18 (19%)	16 (16%)	3 (3%)	2 (2%)	1 (1%)		984
30 (35%)	27 (31%)	5 (6%)	2 (2%)	0 (0%)	2 (2%)		912
27 (31%)	23 (26%)	12 (14%)	4 (5%)	1 (1%)	1 (1%)		862
21 (24%)	18 (21%)	7 (8%)	2 (2%)	3 (3%)	4 (5%)		759
122 (27%)	106 (23%)	50 (11%)	13 (3%)	9 (2%)	9 (2%)		$1,421
3 (38%)	1 (13%)	0 (0%)	0 (0%)	0 (0%)	1 (13%)		$1,373
12 (27%)	9 (20%)	4 (9%)	1 (2%)	1 (2%)	1 (2%)		777
0 (0%)	2 (50%)	0 (0%)	1 (25%)	0 (0%)	0 (0%)		1,002
4 (31%)	2 (15%)	1 (8%)	1 (8%)	0 (0%)	0 (0%)		400
3 (33%)	3 (33%)	1 (11%)	0 (0%)	0 (0%)	1 (11%)		337
0 (0%)	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		142
7 (23%)	9 (30%)	1 (3%)	1 (3%)	0 (0%)	0 (0%)		1,059
6 (43%)	2 (14%)	1 (7%)	0 (0%)	1 (7%)	0 (0%)		930
9 (24%)	11 (29%)	4 (11%)	1 (3%)	0 (0%)	0 (0%)		1,582
6 (16%)	6 (16%)	3 (8%)	0 (0%)	2 (5%)	1 (3%)		2,189
2 (25%)	3 (38%)	1 (13%)	0 (0%)	0 (0%)	0 (0%)		1,113
1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)		320
5 (33%)	5 (33%)	3 (20%)	0 (0%)	0 (0%)	0 (0%)		1,249
10 (29%)	9 (26%)	6 (18%)	1 (3%)	0 (0%)	0 (0%)		2,215
4 (17%)	10 (43%)	2 (9%)	0 (0%)	0 (0%)	0 (0%)		984
6 (19%)	6 (19%)	5 (16%)	1 (3%)	0 (0%)	2 (6%)		1,073
4 (57%)	1 (14%)	0 (0%)	2 (29%)	0 (0%)	0 (0%)		867
7 (41%)	2 (12%)	1 (6%)	0 (0%)	0 (0%)	0 (0%)		1,369
4 (25%)	3 (19%)	3 (19%)	0 (0%)	1 (6%)	0 (0%)		2,440
7 (47%)	2 (13%)	2 (13%)	1 (7%)	0 (0%)	0 (0%)		1,685
3 (18%)	2 (12%)	4 (24%)	0 (0%)	1 (6%)	1 (6%)		783
2 (33%)	0 (0%)	2 (33%)	1 (17%)	0 (0%)	0 (0%)		807
2 (22%)	2 (22%)	0 (0%)	1 (11%)	1 (11%)	0 (0%)		1,847
10 (24%)	13 (31%)	4 (10%)	1 (2%)	2 (5%)	2 (5%)		1,216
1 (25%)	0 (0%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)		502
4 (40%)	2 (20%)	1 (10%)	0 (0%)	0 (0%)	0 (0%)		580
9 (20%)	8 (18%)	2 (4%)	1 (2%)	0 (0%)	0 (0%)		$ 918
9 (26%)	8 (24%)	2 (6%)	0 (0%)	1 (3%)	2 (6%)		392
7 (18%)	7 (18%)	6 (16%)	2 (5%)	2 (5%)	3 (8%)		1,654
18 (39%)	7 (15%)	1 (2%)	3 (7%)	0 (0%)	2 (4%)		2,858
43 (26%)	30 (18%)	11 (7%)	6 (4%)	3 (2%)	7 (4%)		$1,405

5.

"Pension cost equalled 7.1 percent of wages and salaries for the average Fortune 500 Industrial during 1981."

Pension Cost as a Percent of Wages and Salaries, 1981 and 1980

Relatively few companies report payroll information in their annual report. For that reason, we limit the size of our next Exhibit to only those groups having sufficient representation upon which sound generalizations can be made. Moreover, the universe of companies reporting such information can change significantly from one year to the next. For example, our universe of utility companies this year is roughly half as large as that shown in last year's report, but the absolute dollars being compared are much larger because of the inclusion of a large utility in this year's Exhibit. The inclusion of this large utility affects the comparability of figures for Non-Industrial companies from last year's Executive Report to this year's.

Pension cost figures presented in this section reflect only those companies which disclosed wages and salaries information. On average, the 188 Industrial and Non-Industrial companies included in the Exhibit for 1981 had pension cost equal to 7.8 percent of wages and salaries.

Of the industry groups with at least eight companies reporting payroll data, the petroleum refining group and the metal manufacturing group had the highest ratios, as they did in last year's report—8.5 and 8.7 percent, respectively. The lowest group (with at least eight companies represented), as in last year's report, was the food industry—at 4.8 percent.

Please note that the wages and salaries shown in Exhibit 5 on pages 22 and 23 include the cost of employee benefits for 100 companies.

Pension cost as a percent of wages and salaries fell significantly from 1980 to 1981, from 8.5 percent to 7.1 percent for the Industrials, and from 11.3 percent to 9.8 percent for the Non-Industrials. Two reasons for this trend were previously mentioned in Section 2, specifically, that 1981 pension expense reflected favorable market experience during 1980 as well as changes in the actuarial assumptions for some plans (in particular, the use of a higher interest rate in the calculation of annual pension cost).

Pension Cost as a Percent of Wages and Salaries, 1981 and 1980

Fortune 500 Companies
1981 Average: 7.1%
1980 Average: 8.5%

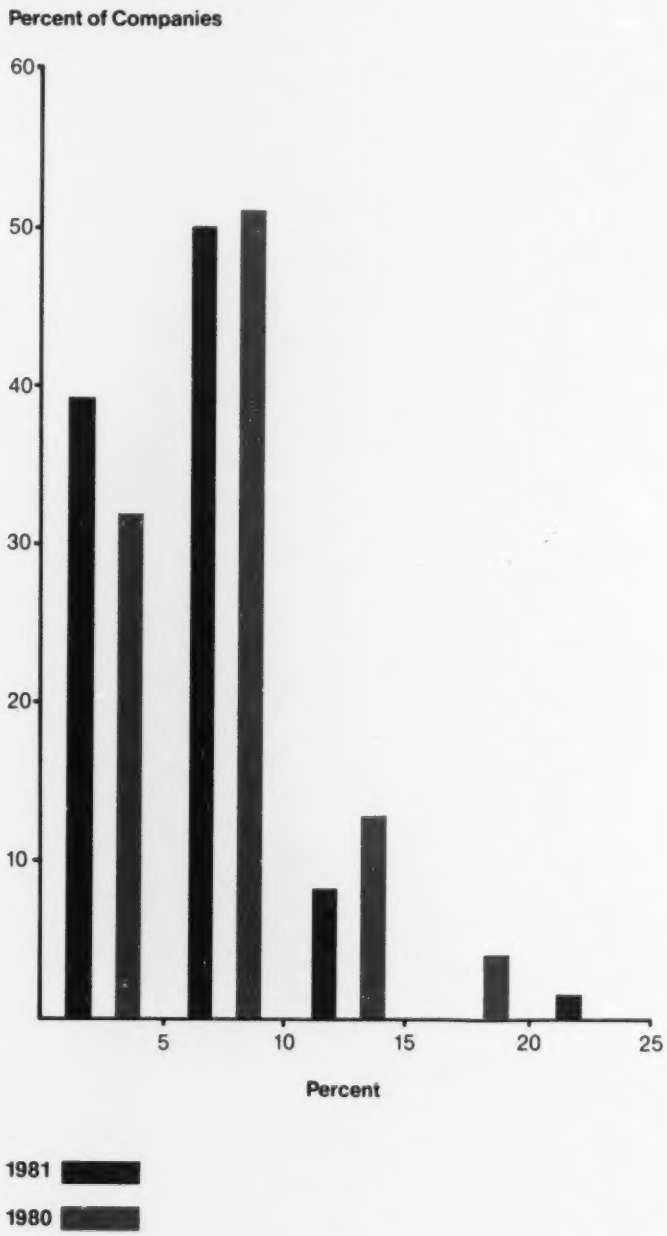

Exhibit 5

Pension Cost as a Percent of Wages and Salaries, 1981 from 1980

By Fortune 500 Industrial Group	Number of Companies 1981	Number of Companies 1980	Pension Cost ($ Millions) 1981	Pension Cost ($ Millions) 1980	Wages & Salaries ($ Millions) 1981	Wages & Salaries ($ Millions) 1980
Fortune 1-100	50	49	$8,302.0	$ 9,109.2	$108,637.1	$ 99,262.3
Fortune 101-200	23	22	890.3	841.4	16,916.1	14,205.4
Fortune 201-300	20	15	419.4	305.9	7,524.8	5,361.1
Fortune 301-400	14	12	186.6	156.5	4,202.3	3,387.3
Fortune 401-500	12	11	114.6	88.6	1,728.5	1,351.7
Total	119	109	$9,912.9	$10,501.6	$139,008.8	$123,567.8
Fortune 50 Non-Industrials						
Commercial banking	45	45	$ 507.5	$ 502.7	$ 10,325.1	$ 8,996.5
Transportation	12	11	791.0	784.7	12,009.9	10,453.5
Utilities	10	9	3,622.1	3,759.1	27,861.3	25,071.1
Total	67	65	$4,920.6	$ 5,046.5	$ 50,196.3	$ 44,521.1

Pension Cost as a Percent of Wages & Salaries		Number of Companies (Percent of Sample)									
		Pension Cost=.1-4.9% of Wages & Salaries		Pension Cost=5-9.9% of Wages & Salaries		Pension Cost=10-14.9% of Wages & Salaries		Pension Cost=15-19.9 of Wages & Salaries		Pension Cost=20% or More of Wages & Salaries	
1981	1980	1981	1980	1981	1980	1981	1980	1981	1980	1981	1980
[illegible]	9.2%	14 (28%)	12 (24%)	29 (58%)	24 (49%)	7 (14%)	10 (20%)	0 (0%)	3 (6%)	0 (0%)	0 (0%)
[illegible]	5.9%	11 (48%)	7 (32%)	12 (52%)	14 (64%)	0 (0%)	1 (5%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
[illegible]	5.7%	9 (45%)	5 (33%)	9 (45%)	9 (60%)	1 (5%)	1 (7%)	0 (0%)	0 (0%)	1 (5%)	0 (0%)
[illegible]	4.6%	9 (64%)	7 (58%)	5 (36%)	5 (42%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
[illegible]	6.6%	4 (33%)	4 (36%)	5 (42%)	4 (36%)	2 (17%)	2 (18%)	0 (0%)	1 (9%)	1 (8%)	0 (0%)
[illegible]	8.5%	47 (39%)	35 (32%)	60 (50%)	56 (51%)	10 (8%)	14 (13%)	0 (0%)	4 (4%)	2 (2%)	0 (0%)
[illegible]	5.6%	25 (56%)	18 (40%)	18 (40%)	25 (56%)	1 (2%)	1 (2%)	1 (2%)	0 (0%)	0 (0%)	1 (2%)
[illegible]	7.5%	2 (17%)	1 (9%)	8 (67%)	8 (73%)	2 (17%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
[illegible]	15.0%	1 (10%)	0 (0%)	6 (60%)	6 (67%)	2 (20%)	1 (11%)	0 (0%)	1 (11%)	1 (10%)	1 (11%)
[illegible]	11.3%	28 (42%)	19 (29%)	32 (48%)	39 (60%)	5 (7%)	4 (6%)	1 (1%)	1 (2%)	1 (1%)	2 (3%)

6.

"The aggregate value of the companies' net assets exceeds the aggregate value of total vested benefits."

Funded Ratio: Total Vested Benefits

The 627 companies that complied with the disclosure requirements of FASB Statement Number 36 have been grouped according to the degree of funding for Exhibit 6. The first section of the Exhibit shows the value of plan assets and the value of total vested benefits for those companies that are fully funded, i.e., where the value of assets exceeds the value of total vested benefits; the second section of the Exhibit shows similar data for companies that are not fully funded. The third section combines the data for both groups to show an *adjusted* ratio of net assets-to-total vested benefits. The adjustment for the combined groups is designed to compensate for the effect of the overfunded plans by limiting each company's ratio to no greater than 100 percent. The reduced average ratio more accurately measures the aggregate degree of funding for all the surveyed companies.

Almost three fourths of the surveyed Industrial and Non-Industrial companies were fully funded with respect to total vested benefits. The 162 Industrial and Non-Industrial companies that were not fully funded had 85.5 percent of total vested benefits covered by net assets. The overall average degree of funding, after limiting each company's ratio to a maximum of 100 percent, was 93.9 percent for the industrials and 97.5 percent for the Non-Industrials, reflecting average FASB Statement Number 36 interest assumptions of 7.58 and 7.44 percent, respectively.

Average FASB Statement Number 36 interest rates are shown in each of the Exhibit's three sections. Company size has a greater impact upon the Industrials' average rate than the degree of funding, although companies in the fully-funded category tend to use a slightly higher average interest rate than corresponding companies that were not fully funded.

The Non-Industrial firms in the transportation sector have the lowest ratio of net assets to total vested benefits among the Non-Industrial firms, while the Industrial companies in the two industry groups associated with land and water transportation equipment have the lowest ratios among the Industrials. (Those groups are the motor vehicles group and the group comprised of shipbuilders and manufacturers of railroad and other transportation equipment.)

Net assets for the Industrial and Non-Industrial companies shown in the Exhibit total over $245 billion, while total vested benefits for the same companies were less than $213 billion, producing an unadjusted average degree of funding of approximately 115 percent.

Section 10 of this Executive Report describes the approximate effect of using alternative uniform rates of interest in the calculation of unfunded vested benefits for the companies included in Exhibit 6.

Comparison of Funded Ratios, 1981 and 1980 (Total Vested Benefits)

	Industrials		Non-Industrials	
	1981	1980	1981	1980
Number of Companies	456	386	171	168
Average Funded Ratio	93.9%	91.0%	97.5%	94.8%
Average FASB Interest Rate	7.58%	7.19%	7.44%	6.98%

Exhibit 6

Funded Ratio: Total Vested Benefits (TVB), 1981

By Fortune 500 Industrial Group	Number of Companies	Net Assets = 100% or More of TVB: Total Vested Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent TVB (Average)
Fortune 1-100	71	$66,306.6	$ 82,302.8	8.01%	[illegible]
Fortune 101-200	72	15,797.6	20,301.3	7.67%	[illegible]
Fortune 201-300	60	6,614.9	8,406.8	7.55%	[illegible]
Fortune 301-400	61	3,154.9	4,481.8	7.34%	[illegible]
Fortune 401-500	62	2,471.1	3,199.1	7.25%	[illegible]
Total	326	$94,345.1	$118,691.8	7.58%	[illegible]
Industry Group					
Mining, crude oil production	7	$ 359.4	$ 523.8	7.21%	[illegible]
Food	32	4,351.0	5,559.3	7.52%	[illegible]
Tobacco	3	880.8	1,180.6	7.17%	[illegible]
Textiles, vinyl flooring	11	831.1	1,117.8	8.00%	[illegible]
Apparel	6	168.3	256.6	6.29%	[illegible]
Furniture	1	33.1	59.3	8.75%	[illegible]
Paper, fiber, and wood products	20	4,063.7	4,846.1	8.08%	[illegible]
Publishing, printing	13	1,111.7	1,541.3	6.90%	[illegible]
Chemicals	31	11,684.7	15,908.5	7.81%	[illegible]
Petroleum refining	33	13,783.3	18,565.1	7.53%	[illegible]
Rubber, plastic products	5	1,282.1	1,673.8	8.70%	[illegible]
Leather	1	92.3	107.9	7.50%	[illegible]
Glass, concrete, abrasives, gypsum	9	1,462.8	1,721.1	8.01%	[illegible]
Metal manufacturing	17	8,021.5	8,629.3	7.71%	[illegible]
Metal products	14	3,093.7	3,500.2	7.66%	[illegible]
Electronics, appliances	24	11,867.1	13,942.4	7.47%	[illegible]
Shipbuilding, railrd., trans. equip.	3	196.2	235.7	6.77%	[illegible]
Measuring, scient., photo equip.	13	3,389.7	4,406.6	7.59%	[illegible]
Motor vehicles	6	1,894.5	2,140.4	7.58%	[illegible]
Aerospace	13	11,035.2	14,133.4	7.75%	[illegible]
Pharmaceuticals	13	2,224.6	3,044.2	7.57%	[illegible]
Soaps, cosmetics	6	582.1	852.5	7.56%	[illegible]
Office equip. (incl. computers)	6	6,156.7	7,649.7	6.45%	[illegible]
Industrial & farm equipment	27	4,738.6	5,600.9	7.50%	[illegible]
Music instr., toys, sporting goods	3	289.3	424.6	7.17%	[illegible]
Beverages	9	751.6	1,070.7	7.75%	[illegible]
Fortune 50 Non-Industrial Groups					
Commercial banking	45	$ 3,628.1	$ 5,605.4	7.65%	[illegible]
Retailing	29	1,772.0	2,865.9	7.50%	[illegible]
Transportation	27	4,314.4	5,710.5	7.40%	[illegible]
Utilities	38	31,064.2	45,878.3	7.56%	[illegible]
Total	139	$40,778.7	$ 60,060.1	7.54%	[illegible]

Net Assets = Less Than 100% of TVB					Combined Figures—All Companies			
Number of Companies	Total Vested Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of TVB (Average)	Number of Companies	Interest Assumption (Average)	NA as a Percent of TVB (Adjusted Average)	NA per Company (Average) ($ Millions)
23	$49,304.0	$42,720 3	8.28%		94	8.08%		$1,330.0
26	9,380.7	7,542.0	7.72%	80.4%	98	7.68%	92.7%	284.1
30	5,356.9	4,705.1	7.29%	87.8%	90	7.46%	94.6%	145.7
26	2,916.2	2,254.5	7.53%	77.3%	87	7.39%	89.1%	77.4
25	1,591.9	1,332.8	7.13%	83.7%	87	7.21%	93.6%	52.1
130	$68,549.7	$58,554.7	7.57%	85.4%	456	7.58%	93.9%	$ 388.7
2	$ 157.3	$ 144.8	7.55%	92.1%	9	7.29%	97.6%	$ 74.3
13	2,479.6	2,044.9	8.02%	82.5%	45	7.66%	93.6%	169.0
1	350.1	328.9	8.00%	93.9%	4	7.38%	98.3%	377.4
2	64.0	49.8	7.50%	77.8%	13	7.92%	96.4%	89.8
3	243.3	193.7	7.57%	79.6%	9	6.72%	87.9%	50.0
0	.0	.0	.00%	.0%	1	8.75%	100.0%	59.3
10	1,406.4	1,278.1	6.63%	90.9%	30	7.60%	97.7%	204.1
1	1.3	1.0	7.50%	76.9%	14	6.95%	100.0%	110.2
7	1,275.2	1,195.5	7.14%	93.8%	38	7.69%	99.4%	450.1
5	4,092.4	3,793.9	6.80%	92.7%	38	7.43%	98.3%	588.4
3	2,673.9	2,091.5	8.80%	78.2%	8	8.74%	85.3%	470.7
0	.0	.0	.00%	.0%	1	7.50%	100.0%	107.9
6	1,840.4	1,621.4	7.35%	88.1%	15	7.74%	93.4%	222.8
18	11,764.6	10,073.3	8.66%	85.6%	35	8.20%	91.5%	534.4
10	1,363.4	1,240.1	7.51%	91.0%	24	7.60%	97.2%	197.5
6	3,346.3	2,861.8	7.54%	85.5%	30	7.49%	96.8%	560.1
4	835.6	658.2	7.05%	78.8%	7	6.93%	82.8%	127.7
4	343.2	323.3	6.63%	94.2%	17	7.36%	99.5%	278.2
10	29,198.9	24,534.9	7.70%	84.0%	16	7.65%	95.0%	1,667.2
1	185.7	170.7	8.50%	91.9%	14	7.80%	99.0%	1,021.7
3	524.1	485.6	7.17%	92.7%	16	7.50%	98.6%	220.6
0	.0	.0	.00%	.0%	6	7.56%	100.0%	142.1
3	1,670.9	1,628.4	8.05%	97.5%	9	6.98%	99.5%	1,030.3
15	4,614.4	3,724.6	7.20%	80.7%	42	7.39%	90.5%	222.0
1	3.7	2.6	6.00%	70.3%	4	6.88%	98.6%	106.8
2	115.0	107.7	7.25%	93.7%	11	7.66%	99.2%	107.1
1	$ 10.5	$ 8.4	7.00%	80.0%	46	7.63%	99.9%	$ 122.0
8	2,094.6	1,923.1	7.16%	91.8%	37	7.42%	95.6%	129.4
13	4,006.9	3,271.3	6.92%	81.6%	40	7.25%	91.2%	224.5
10	2,830.8	2,504.8	6.95%	88.5%	48	7.43%	90.0%	1,008.0
32	$ 8,942.8	$ 7,707.6	6.99%	86.2%	171	7.44%	97.5%	$ 396.3

7.

"Ninety-one percent of total accumulated benefits are covered by corresponding plan assets."

Funded Ratio: Total Accumulated Benefits

Exhibit 7 on pages 30 and 31 shows the net plan assets as a percentage of total accumulated (vested and nonvested) benefits. The data are arranged in the same manner as in Exhibit 6.

Over 61 percent of the Industrial and Non-Industrial companies in Exhibit 7 are fully funded with respect to total accumulated benefits. The 242 companies that are not fully funded have an average net assets-to-total accumulated benefits ratio of 81 percent. With all companies included in the average, subject to a maximum ratio of 100 percent for each company, the 456 Industrials' net assets cover 89.4 percent of their total accumulated benefits, while the 171 Non-Industrials cover 96.4 percent of total accumulated benefits with their net assets.

As in Exhibit 6, the Industrial and Non-Industrial companies associated with transportation have somewhat lower average ratios than other types of firms.

On the whole, the average company in our survey is nearly as funded with respect to total accumulated benefits as it is with respect to total vested benefits: 89.4 versus 93.9 percent, respectively, for the Industrials, and 96.4 versus 97.5 percent, respectively, for the Non-Industrials.

Comparison of Funded Ratios, 1981 and 1980 (Total Accumulated Benefits)

	Industrials		Non-Industrials	
	1981	1980	1981	1980
Number of Companies	456	386	171	167
Average Funded Ratio	89.4%	86.2%	96.4%	93.1%
Average FASB Interest Rate	7.58%	7.19%	7.44%	6.98%

Exhibit 7

Funded Ratio: Total Accumulated Benefits (TAB), 1981

By Fortune 500 Industrial Group	Net Assets = 100% or More of TAB				
	Number of Companies	Total Accumulated Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of TAB (Average)
Fortune 1-100	64	$59,912.0	$71,252.2	7.98%	[illegible]
Fortune 101-200	57	11,954.7	15,429.3	7.64%	[illegible]
Fortune 201-300	43	4,524.0	5,801.3	7.63%	[illegible]
Fortune 301-400	52	3,049.3	4,032.8	7.42%	[illegible]
Fortune 401-500	48	2,178.9	2,678.5	7.37%	[illegible]
Total	264	$81,618.9	$99,194.1	7.63%	[illegible]
Industry Group					
Mining, crude oil production	6	$ 362.9	$ 499.3	7.08%	[illegible]
Food	29	4,542.0	5,403.4	7.61%	[illegible]
Tobacco	3	1,018.1	1,180.6	7.17%	[illegible]
Textiles, vinyl flooring	10	747.2	967.0	8.00%	[illegible]
Apparel	3	143.1	200.1	6.83%	[illegible]
Furniture	1	35.6	59.3	8.75%	[illegible]
Paper, fiber, and wood products	13	2,543.1	3,061.2	8.03%	[illegible]
Publishing, printing	11	882.3	1,250.0	7.07%	[illegible]
Chemicals	26	9,422.8	12,891.8	7.79%	[illegible]
Petroleum refining	31	14,015.8	17,906.7	7.58%	[illegible]
Rubber, plastic products	3	1,304.4	1,578.6	9.50%	[illegible]
Leather	1	97.7	107.9	7.50%	[illegible]
Glass, concrete, abrasives, gypsum	5	969.9	1,107.3	7.96%	[illegible]
Metal manufacturing	13	1,759.7	2,034.7	7.69%	[illegible]
Metal products	11	2,237.1	2,418.5	7.86%	[illegible]
Electronics, appliances	18	11,460.7	12,527.3	7.38%	[illegible]
Shipbuilding, railrd., trans. equip.	1	119.4	142.5	7.50%	[illegible]
Measuring, scient., photo equip.	11	3,736.9	4,279.2	7.55%	[illegible]
Motor vehicles	4	1,656.3	1,713.7	7.88%	[illegible]
Aerospace	12	10,989.0	13,499.7	7.77%	[illegible]
Pharmaceuticals	12	1,900.2	2,516.0	7.58%	[illegible]
Soaps, cosmetics	6	667.9	852.5	7.56%	[illegible]
Office equip. (incl. computers)	4	6,297.2	7,467.9	6.80%	[illegible]
Industrial & farm equipment	19	3,634.5	4,150.5	7.46%	[illegible]
Music instr., toys, sporting goods	3	329.5	424.6	7.17%	[illegible]
Beverages	8	745.6	953.8	7.97%	[illegible]
Fortune 50 Non-Industrial Groups					
Commercial banking	41	$ 3,599.5	$ 5,154.3	7.71%	[illegible]
Retailing	20	1,562.0	2,444.4	7.80%	[illegible]
Transportation	25	3,854.7	4,982.0	7.35%	[illegible]
Utilities	35	34,096.4	45,030.5	7.50%	[illegible]
Total	121	$43,112.6	$57,611.2	7.59%	[illegible]

Net Assets = Less Than 100% of TAB					Combined Figures—All Companies		
Number of Companies	Total Accumulated Benefits ($ Millions)	Total Net Assets ($ Millions)	Interest Assumption (Average)	NA as a Percent of TAB (Average)	Number of Companies	Interest Assumption (Average)	NA as a Percent of TAB (Adjusted Average)
31	$67,028.5	$53,770.9	8.24%	[illegible]	95	8.07%	[illegible]
41	15,386.2	12,414.0	7.74%	80.7%	98	7.68%	89.1%
45	8,463.8	7,286.9	7.33%	86.1%	88	7.48%	90.9%
36	3,815.9	2,703.5	7.32%	70.8%	88	7.38%	83.8%
39	2,258.9	1,853.4	7.02%	82.0%	87	7.21%	90.9%
192	$96,953.3	$78,028.7	7.50%	80.5%	456	7.58%	89.4%
3	191.3	169.3	7.70%	88.5%	9	7.29%	96.0%
15	2,750.8	2,185.6	7.91%	79.5%	44	7.71%	92.2%
1	379.2	328.9	8.00%	86.7%	4	7.38%	96.4%
3	230.7	200.6	7.67%	87.0%	13	7.92%	96.9%
6	324.6	250.2	6.66%	77.1%	9	6.72%	84.1%
0	.0	.0	.00%	.0%	1	8.75%	100.0%
17	3,333.4	3,063.0	7.27%	91.9%	30	7.60%	96.4%
3	311.2	292.3	6.50%	93.9%	14	6.95%	98.4%
12	4,469.9	4,212.2	7.46%	94.2%	38	7.69%	98.1%
7	4,927.0	4,452.3	6.79%	90.4%	38	7.43%	97.5%
5	3,026.5	2,186.7	8.28%	72.3%	8	8.74%	80.6%
0	.0	.0	.00%	.0%	1	7.50%	100.0%
10	2,766.5	2,235.2	7.64%	80.8%	15	7.74%	85.8%
22	19,670.5	16,667.9	8.50%	84.7%	35	8.20%	86.0%
13	2,608.0	2,321.8	7.37%	89.0%	24	7.60%	94.1%
12	5,744.6	4,268.4	7.56%	74.3%	30	7.45%	91.4%
6	1,002.7	751.4	6.83%	74.9%	7	6.93%	77.6%
6	500.7	450.7	7.03%	90.0%	17	7.36%	98.8%
12	33,776.5	24,961.6	7.58%	73.9%	16	7.65%	75.1%
3	986.8	804.4	7.33%	81.5%	15	7.68%	98.5%
4	1,123.9	1,013.8	7.25%	90.2%	16	7.50%	96.4%
0	.0	.0	.00%	.0%	6	7.56%	100.0%
5	2,011.8	1,810.2	7.13%	90.0%	9	6.98%	97.6%
23	6,564.0	5,175.0	7.33%	78.8%	42	7.39%	86.4%
1	4.9	2.6	6.00%	53.1%	4	6.88%	99.3%
3	247.8	224.6	6.83%	90.6%	11	7.66%	97.7%
5	$ 488.0	$ 459.5	7.00%	94.2%	46	7.63%	99.3%
17	2,714.9	2,344.6	6.99%	86.4%	37	7.42%	91.3%
15	4,947.3	3,999.8	7.07%	80.8%	40	7.25%	89.2%
13	4,013.7	3,352.6	7.25%	83.5%	48	7.43%	98.3%
50	$12,163.9	$10,156.5	7.08%	83.5%	171	7.44%	96.4%

8.

"Only nine companies had total vested benefits that exceeded 30 percent of 1981 net worth."

Unfunded Vested Benefits as a Percentage of Net Worth, 1981

The information presented in Exhibit 8 on pages 34 and 35 provides some measure of the potential strain on the average company's resources that would occur if the company had to immediately fund 100 percent of total vested benefits. The exercise is more than theoretical because in the event of an actual plan termination, a company can become liable, on account of certain unfunded vested benefits, to the Pension Benefit Guaranty Corporation for up to 30 percent of its net worth. Only nine of the 625 companies shown in Exhibit 8 have a value of unfunded vested benefits which exceeds 30 percent of the company's net worth. For the average Industrial company, unfunded vested benefits represented only 1.7 percent of its net worth in 1981, down from the 2.7 percent for 1980 shown in last year's Executive Report. For the Non-Industrial companies, the ratio reported last year was 1.2 percent, which has decreased to 0.4 percent shown in Exhibit 8.

Because these figures appear so optimistic, we also compute the average ratio of unfunded vested benefits to net worth for only those companies that have unfunded vested benefits. For the 129 Industrial companies that are not fully funded with respect to total vested benefits, the average Industrial would need to liquidate 6.9 percent of its net worth in order to fully fund its total vested benefits. This figure is roughly 20 percent lower than the 8.6 percent we reported for 1980 in last year's Executive Report. The Non-Industrial companies also improved their position in 1981: The average Non-Industrial with unfunded vested benefits would require only 2.4 percent of its net worth to fully fund the benefits, less than half of last year's reported figure of 5.5 percent.

Only three industry groups have a double-digit ratio, even when only those companies with unfunded vested benefits are considered. The motor vehicles group had the highest ratio, at 14.8 percent. Among the Non-Industrial companies with unfunded vested benefits, the transportation companies reported the highest amount of unfunded vested benefits relative to net worth, at 3.8 percent.

Unfunded Vested Benefits as a Percent of Net Worth, 1981

Fortune 500 Companies
Average: 1.7%

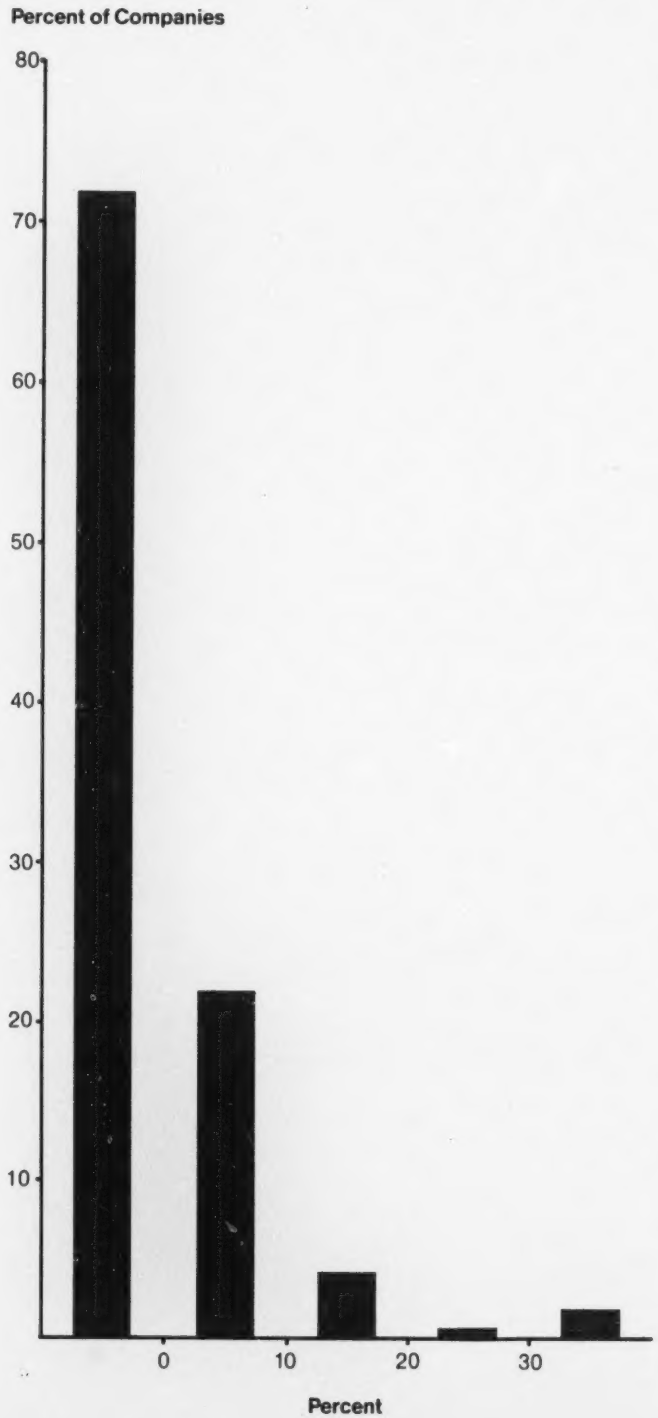

Exhibit 8

Unfunded Vested Benefits (UVB) as a Percent of Net Worth, 1981

By Fortune 500 Industrial Group		Number of Companies	UVB ($ Millions)	Net Worth ($ Millions)
Fortune 1-100		94	$ 6,583.7	$369,057.4
Fortune 101-200		98	1,838.7	104,710.0
Fortune 201-300		90	651.8	51,571.7
Fortune 301-400		87	661.7	27,821.5
Fortune 401-500		86	211.7	16,127.1
	Total	455	$ 9,947.6	$569,287.7
Industry Group				
Mining, crude oil production		9	$ 12.5	$ 9,486.2
Food		44	387.3	28,815.5
Tobacco		4	21.2	9,822.8
Textiles, vinyl flooring		13	14.2	4,571.5
Apparel		9	49.6	3,243.6
Furniture		1	.0	200.3
Paper, fiber, and wood products		30	128.3	26,018.1
Publishing, printing		14	.3	7,007.6
Chemicals		38	79.7	49,617.1
Petroleum refining		38	298.5	160,774.9
Rubber, plastic products		8	582.4	6,887.8
Leather		1	.0	336.9
Glass, concrete, abrasives, gypsum		15	219.0	8,683.4
Metal manufacturing		35	1,691.3	34,375.5
Metal products		24	123.3	13,973.5
Electronics, appliances		30	484.5	36,217.2
Shipbuilding, railrd., trans. equip.		7	177.4	2,669.0
Measuring, scient., photo equip.		17	19.9	21,229.0
Motor vehicles		16	4,664.0	36,086.3
Aerospace		14	15.0	14,034.3
Pharmaceuticals		16	38.5	19,707.2
Soaps, cosmetics		6	.0	4,402.1
Office equip. (incl. computers)		9	42.5	31,819.9
Industrial & farm equipment		42	889.8	29,369.1
Music instr., toys, sporting goods		4	1.1	1,379.1
Beverages		11	7.3	8,559.8
Fortune 50 Non-Industrial Groups				
Commercial banking		46	$ 2.1	$ 42,595.5
Retailing		37	171.5	29,463.3
Transportation		39	587.0	26,485.0
Utilities		48	326.0	152,043.3
	Total	170	$ 1,086.6	$250,587.1

UVB as a Percent of Net Worth (Average)	Number of Companies (Percent of Sample)					Companies Where UVB Exists	
	UVB=0	UVB=.1-9.9% of Net Worth	UVB=10-19.9% of Net Worth	UVB=20-29.9% of Net Worth	UVB=At Least 30% of Net Worth	Number of Companies	UVB as a Percent of Net Worth (Average)
[redacted]	71 (76%)	15 (16%)	6 (6%)	1 (1%)	1 (1%)	23	[redacted]
[redacted]	72 (73%)	21 (21%)	2 (2%)	0 (0%)	3 (3%)	26	[redacted]
[redacted]	60 (67%)	27 (30%)	2 (2%)	0 (0%)	1 (1%)	30	[redacted]
[redacted]	61 (70%)	17 (20%)	6 (7%)	0 (0%)	3 (3%)	26	[redacted]
[redacted]	62 (72%)	19 (22%)	3 (3%)	2 (2%)	0 (0%)	24	[redacted]
[redacted]	326 (72%)	99 (22%)	19 (4%)	3 (1%)	8 (2%)	129	[redacted]
[redacted]	7 (78%)	2 (22%)	0 (0%)	0 (0%)	0 (0%)	2	[redacted]
[redacted]	32 (73%)	10 (23%)	2 (5%)	0 (0%)	0 (0%)	12	[redacted]
[redacted]	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	11 (85%)	1 (8%)	0 (0%)	1 (8%)	0 (0%)	2	[redacted]
[redacted]	6 (67%)	2 (22%)	1 (11%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	20 (67%)	9 (30%)	1 (3%)	0 (0%)	0 (0%)	10	[redacted]
[redacted]	13 (93%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	31 (82%)	7 (18%)	0 (0%)	0 (0%)	0 (0%)	7	[redacted]
[redacted]	33 (87%)	5 (13%)	0 (0%)	0 (0%)	0 (0%)	5	[redacted]
[redacted]	5 (63%)	2 (25%)	0 (0%)	0 (0%)	1 (13%)	3	[redacted]
[redacted]	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	9 (60%)	3 (20%)	1 (7%)	1 (7%)	1 (7%)	6	[redacted]
[redacted]	17 (49%)	10 (29%)	4 (11%)	1 (3%)	3 (9%)	18	[redacted]
[redacted]	14 (58%)	10 (42%)	0 (0%)	0 (0%)	0 (0%)	10	[redacted]
[redacted]	24 (80%)	2 (7%)	4 (13%)	0 (0%)	0 (0%)	6	[redacted]
[redacted]	3 (43%)	2 (29%)	2 (29%)	0 (0%)	0 (0%)	4	[redacted]
[redacted]	13 (76%)	4 (24%)	0 (0%)	0 (0%)	0 (0%)	4	[redacted]
[redacted]	6 (38%)	6 (38%)	2 (13%)	0 (0%)	2 (13%)	10	[redacted]
[redacted]	13 (93%)	1 (7%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	13 (81%)	3 (19%)	0 (0%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	6 (67%)	3 (33%)	0 (0%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	27 (64%)	12 (29%)	2 (5%)	0 (0%)	1 (2%)	15	[redacted]
[redacted]	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	9 (82%)	2 (18%)	0 (0%)	0 (0%)	0 (0%)	2	[redacted]
[redacted]	45 (98%)	1 (2%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	29 (78%)	5 (14%)	2 (5%)	1 (3%)	0 (0%)	8	[redacted]
[redacted]	27 (69%)	11 (28%)	0 (0%)	0 (0%)	1 (3%)	12	[redacted]
[redacted]	38 (79%)	10 (21%)	0 (0%)	0 (0%)	0 (0%)	10	[redacted]
[redacted]	139 (82%)	27 (16%)	2 (1%)	1 (1%)	1 (1%)	31	[redacted]

9.

"Only 11 companies had total accumulated benefits that exceeded 30 percent of 1981 net worth."

Unfunded Total Accumulated Benefits as a Percent of Net Worth, 1981

The ratios shown in Exhibit 9 are slightly higher than corresponding figures in Exhibit 8 since we are including the value of nonvested benefits in the calculation of unfunded total accumulated benefits. Just as in Exhibits 6 and 7, 62 Industrial companies and 18 Non-Industrial companies do not enjoy fully funded status with respect to total accumulated benefits that existed for them with respect to their vested benefits. The 191 Industrials which had unfunded accumulated benefits would need less than 10 percent of net worth, on average, to fully fund such benefits. The corresponding figure reported for 1980 in last year's Executive Report was 11.3 percent. For the 49 Non-Industrial firms with unfunded total accumulated benefits, 3.0 percent of net worth, on average, would be required to fully fund such benefits.

The only type of company that was substantially affected by the inclusion of nonvested benefits was the motor vehicle group, whose average ratio of total accumulated benefits-to-net worth was 24.4 percent, nearly double the average ratio shown in Exhibit 8 with respect to unfunded vested benefits. The only other industry group with a double-digit ratio in Exhibit 9 is the rubber and plastics group. On the brighter side—only ten Industrial companies had a ratio over 30 percent, two more than had a ratio over 30 percent with respect to vested benefits in Exhibit 8.

On the whole, present values of total accumulated benefits not covered by assets are not large enough to constitute a potential problem to the average company in our survey.

Unfunded Total Accumulated Benefits as a Percent of Net Worth, 1980

Fortune 500 Companies
Average: 3.3%

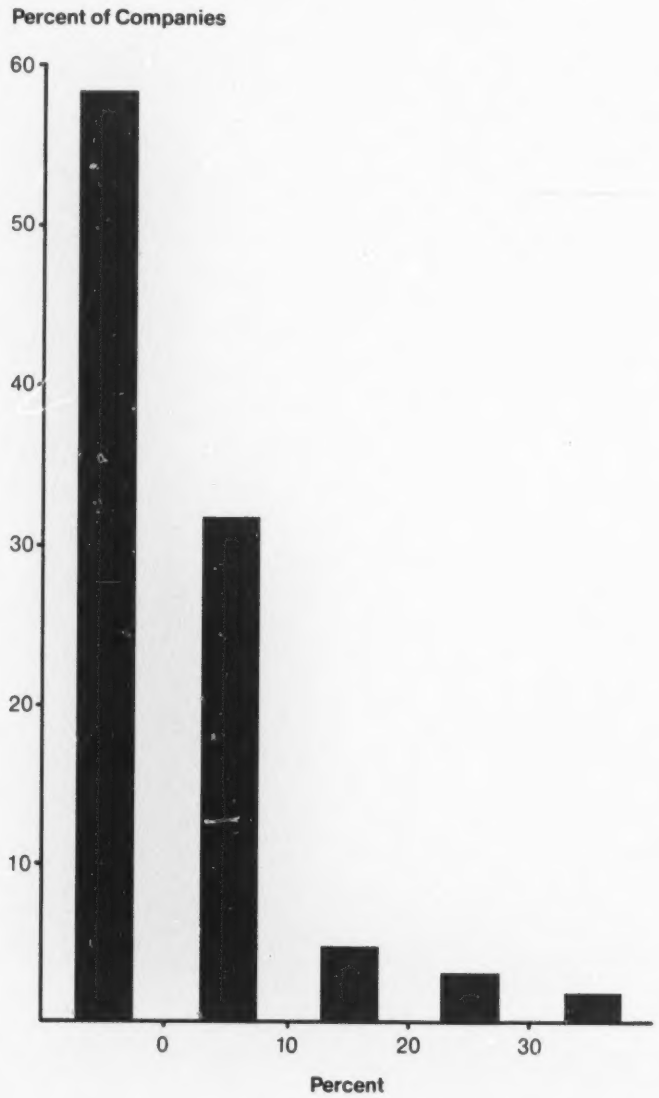

Exhibit 9

Unfunded Total Accumulated Benefits (UTAB) as a Percent of Net Worth, 1981

By Fortune 500 Industrial Group		Number of Companies	UTAB ($ Millions)	Net Worth ($ Millions)
Fortune 1-100		95	$13,257.6	$370,480.0
Fortune 101-200		98	2,972.2	104,710.0
Fortune 201-300		88	1,176.9	51,189.3
Fortune 301-400		88	1,112.4	28,167.1
Fortune 401-500		86	357.4	16,127.1
	Total	455	$18,876.5	$570,673.5
Industry Group				
Mining, crude oil production		9	22.0	9,486.2
Food		43	517.1	28,730.5
Tobacco		4	50.3	9,822.8
Textiles, vinyl flooring		13	30.1	4,571.5
Apparel		9	74.4	3,243.6
Furniture		1	.0	200.3
Paper, fiber, and wood products		30	270.4	26,018.1
Publishing, printing		14	18.9	7,007.6
Chemicals		38	257.7	49,617.1
Petroleum refining		38	474.7	160,774.9
Rubber, plastic products		8	839.8	6,887.8
Leather		1	.0	336.9
Glass, concrete, abrasives, gypsum		15	531.3	8,683.4
Metal manufacturing		35	3,002.6	34,375.5
Metal products		24	286.2	13,973.5
Electronics, appliances		30	1,476.2	37,342.4
Shipbuilding, railrd., trans. equip.		7	251.3	2,669.0
Measuring, scient., photo equip.		17	50.0	21,229.0
Motor vehicles		16	8,814.9	36,086.3
Aerospace		15	182.4	14,379.9
Pharmaceuticals		16	110.1	19,707.2
Soaps, cosmetics		6	.0	4,402.1
Office equip. (incl. computers)		9	201.6	31,819.9
Industrial & farm equipment		42	1,389.0	29,369.1
Music instr., toys, sporting goods		4	2.3	1,379.1
Beverages		11	23.2	8,559.8
Fortune 50 Non-Industrial Groups				
Commercial banking		46	$ 28.5	$ 42,595.5
Retailing		37	370.3	29,463.3
Transportation		39	794.4	26,485.0
Utilities		48	661.1	152,043.3
	Total	170	$ 1,854.3	$250,587.1

UTAB as a Percent of Net Worth (Average)	Number of Companies (Percent of Sample)					Companies Where UTAB Exists	
	UTAB=0	UTAB=.1-9.9% of Net Worth	UTAB=10-19.9% of Net Worth	UTAB=20-29.9% of Net Worth	UTAB=At Least 30% of Net Worth	Number of Companies	UTAB as a Percent of Net Worth (Average)
[redacted]	64 (67%)	18 (19%)	5 (5%)	6 (6%)	2 (2%)	31	[redacted]
[redacted]	57 (58%)	33 (34%)	3 (3%)	2 (2%)	3 (3%)	41	[redacted]
[redacted]	43 (49%)	38 (43%)	5 (6%)	1 (1%)	1 (1%)	45	[redacted]
[redacted]	52 (59%)	22 (25%)	7 (8%)	3 (3%)	4 (5%)	36	[redacted]
[redacted]	48 (56%)	33 (38%)	2 (2%)	3 (3%)	0 (0%)	38	[redacted]
[redacted]	264 (58%)	144 (32%)	22 (5%)	15 (3%)	10 (2%)	191	[redacted]
[redacted]	6 (67%)	3 (33%)	0 (0%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	29 (67%)	12 (28%)	1 (2%)	1 (2%)	0 (0%)	14	[redacted]
[redacted]	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	10 (77%)	2 (15%)	0 (0%)	1 (8%)	0 (0%)	3	[redacted]
[redacted]	3 (33%)	5 (56%)	1 (11%)	0 (0%)	0 (0%)	6	[redacted]
[redacted]	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	13 (43%)	16 (53%)	1 (3%)	0 (0%)	0 (0%)	17	[redacted]
[redacted]	11 (79%)	3 (21%)	0 (0%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	26 (68%)	12 (32%)	0 (0%)	0 (0%)	0 (0%)	12	[redacted]
[redacted]	31 (82%)	6 (16%)	1 (3%)	0 (0%)	0 (0%)	7	[redacted]
[redacted]	3 (38%)	3 (38%)	1 (13%)	0 (0%)	1 (13%)	5	[redacted]
[redacted]	1 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	5 (33%)	5 (33%)	2 (13%)	2 (13%)	1 (7%)	10	[redacted]
[redacted]	13 (37%)	12 (34%)	3 (9%)	4 (11%)	3 (9%)	22	[redacted]
[redacted]	11 (46%)	12 (50%)	1 (4%)	0 (0%)	0 (0%)	13	[redacted]
[redacted]	18 (60%)	7 (23%)	1 (3%)	2 (7%)	2 (7%)	12	[redacted]
[redacted]	1 (14%)	4 (57%)	1 (14%)	1 (14%)	0 (0%)	6	[redacted]
[redacted]	11 (65%)	6 (35%)	0 (0%)	0 (0%)	0 (0%)	6	[redacted]
[redacted]	4 (25%)	4 (25%)	3 (19%)	3 (19%)	2 (13%)	12	[redacted]
[redacted]	12 (80%)	1 (7%)	1 (7%)	1 (7%)	0 (0%)	3	[redacted]
[redacted]	12 (75%)	4 (25%)	0 (0%)	0 (0%)	0 (0%)	4	[redacted]
[redacted]	6 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0	[redacted]
[redacted]	4 (44%)	5 (56%)	0 (0%)	0 (0%)	0 (0%)	5	[redacted]
[redacted]	19 (45%)	17 (40%)	5 (12%)	0 (0%)	1 (2%)	23	[redacted]
[redacted]	3 (75%)	1 (25%)	0 (0%)	0 (0%)	0 (0%)	1	[redacted]
[redacted]	8 (73%)	3 (27%)	0 (0%)	0 (0%)	0 (0%)	3	[redacted]
[redacted]	41 (89%)	5 (11%)	0 (0%)	0 (0%)	0 (0%)	5	[redacted]
[redacted]	20 (54%)	13 (35%)	2 (5%)	2 (5%)	0 (0%)	17	[redacted]
[redacted]	25 (64%)	12 (31%)	1 (3%)	0 (0%)	1 (3%)	14	[redacted]
[redacted]	35 (73%)	13 (27%)	0 (0%)	0 (0%)	0 (0%)	13	[redacted]
[redacted]	121 (71%)	43 (25%)	3 (2%)	2 (1%)	1 (1%)	49	[redacted]

10.

"Ninety-four percent of the companies have fully funded vested benefits as adjusted for a uniform 10 percent interest assumption."

Effect of the Interest Assumption on Unfunded Vested Benefits, 1981

For each company included in Exhibit 10 on pages 42 and 43, we applied a formula (based on each company's FASB Statement Number 36 interest rate) to the company's reported value of total vested benefits. The formula actuarially adjusts the value of benefits for changes in the assumed rate of interest; hence the adjusted values represent our estimate of each company's total vested benefits on alternative interest rate assumptions. The revised value of vested benefits on each alternative basis was compared to the actual value of plan assets as disclosed by each company. The resulting figures for the value of total vested benefits on each of two alternative interest rate assumptions are shown in Exhibit 10, together with a tabulation of the actual unfunded vested benefits as reported by each company.

The lower uniform interest rate of seven percent was chosen because seven percent was the most frequently disclosed interest rate below the overall average rate of 7.58 percent. Because the use of a lower interest rate results in a higher liability, the aggregate amount of unfunded vested benefits increased on the basis of this generally lower and uniform interest rate of seven percent. Most of the increase is attributable to a small percentage of companies, many of which used relatively high interest rates in calculating the actual value of total vested benefits as disclosed in their annual report. This trend is evidenced by the fact that about 93 percent of the companies which had no unfunded vested benefits before the adjustment (465 companies) continued to have no unfunded vested benefits after the adjustment (435 companies). The remaining seven percent of the companies account for all of the estimated increase in unfunded vested benefits, with most of the increase occuring in the motor vehicles group.

The second alternative interest rate selected was 10 percent, the approximate rate that would have been applied by the Pension Benefit Guaranty Corporation in the event of a plan termination on December 31, 1981. Our estimate of the total value of unfunded vested benefits on this basis amounts to just over one-half of the total value of actual amounts disclosed by the Industrial companies. Ninety-four percent of the Industrial and Non-Industrial companies represented in the Exhibit have no unfunded vested benefits on the basis of a uniform interest rate assumption of 10 percent.

One of the chief inferences to be made from Exhibit 10 is that the overwhelming majority of companies in our study are very adequately funded whether the various plans adopt a seven percent interest rate assumption, a ten percent interest rate assumption, or a value between the two. There continue to be a few firms, however, that are below average in funding, some of which tend to use above average interest rates for FASB Statement Number 36 purposes. Accordingly, these firms should not be singled out to represent the typical funding costs and liabilities of large corporate pension plans.

Percentage of Companies with Fully Funded Vested Benefits		Actual Reported Basis	Uniform 7% Interest Assumption	Uniform 10% Interest Assumption
	Industrials	71%	66%	93%
	Non-Industrials	81%	80%	96%
	All companies	74%	70%	94%

Exhibit 10

Effect of Interest Assumption on Unfunded Vested Benefits (UVB), 1981

By Fortune 500 Industrial Group		Number of Companies	Lowest FASB Interest	Highest FASB Interest	Average FASB Interest	Number Companies with UVB=0
Fortune 1-100		94	5.50%	13.00%	8.08%	71
Fortune 101-200		98	5.50%	10.40%	7.68%	72
Fortune 201-300		90	5.00%	12.00%	7.46%	60
Fortune 301-400		87	4.75%	14.50%	7.39%	61
Fortune 401-500		87	5.00%	9.10%	7.21%	62
	Total	456	4.75%	14.50%	7.58%	326
Industry Group						
Mining, crude oil production		9	6.00%	9.75%	7.29%	7
Food		45	5.50%	10.00%	7.66%	32
Tobacco		4	6.50%	8.00%	7.38%	3
Textiles, vinyl flooring		13	6.50%	9.00%	7.92%	11
Apparel		9	5.25%	8.00%	6.72%	6
Furniture		1	8.75%	8.75%	8.75%	1
Paper, fiber, and wood products		30	5.00%	9.50%	7.60%	20
Publishing, printing		14	6.00%	8.00%	6.95%	13
Chemicals		38	5.50%	12.00%	7.69%	31
Petroleum refining		38	4.75%	11.50%	7.43%	33
Rubber, plastic products		8	7.00%	13.00%	8.74%	5
Leather		1	7.50%	7.50%	7.50%	1
Glass, concrete, abrasives, gypsum		15	6.00%	9.00%	7.74%	9
Metal manufacturing		35	5.50%	14.50%	8.20%	17
Metal products		24	5.70%	10.00%	7.60%	14
Electronics, appliances		30	6.00%	9.50%	7.49%	24
Shipbuilding, railrd., trans. equip.		7	5.80%	7.50%	6.93%	3
Measuring, scient., photo equip.		17	5.00%	10.00%	7.36%	13
Motor vehicles		16	6.00%	10.00%	7.65%	6
Aerospace		14	6.00%	10.00%	7.80%	13
Pharmaceuticals		16	5.00%	9.75%	7.50%	13
Soaps, cosmetics		6	6.75%	9.00%	7.56%	6
Office equip. (incl. computers)		9	5.00%	8.65%	6.98%	6
Industrial & farm equipment		42	5.00%	10.70%	7.39%	27
Music instr., toys, sporting goods		4	6.00%	8.00%	6.88%	3
Beverages		11	5.50%	10.50%	7.66%	9
Fortune 50 Non-Industrial Groups						
Commercial banking		46	5.50%	14.20%	7.63%	45
Retailing		37	6.00%	10.00%	7.42%	29
Transportation		40	5.00%	9.90%	7.25%	27
Utilities		48	5.00%	12.00%	7.43%	38
	Total	171	5.00%	14.20%	7.44%	139

Actual Basis			Seven Percent Basis			PBGC (10 Percent) Basis		
						As of December 31, 1981		
Number of Companies with UVB	Average FASB Interest if UVB Exists	Actual UVB ($ Millions)	Number of Companies with UVB=0	Number of Companies with UVB	UVB ($ Millions)	Number of Companies with UVB=0	Number of Companies with UVB	UVB ($ Millions)
23	8.28%		63	31		84	10	
26	7.72%		58	40		92	6	
30	7.29%		57	33		85	5	
26	7.53%		61	26		79	8	
25	7.13%		60	27		84	3	
130	7.57%		299	157		424	32	
2	7.55%		6	3		9	0	
13	8.02%		29	16		42	3	
1	8.00%		3	1		4	0	
2	7.50%		9	4		12	1	
3	7.57%		6	3		8	1	
0	.00%		1	0		1	0	
10	6.63%		18	12		30	0	
1	7.50%		13	1		14	0	
7	7.14%		27	11		38	0	
5	6.80%		35	3		38	0	
3	8.80%		3	5		5	3	
0	.00%		1	0		1	0	
6	7.35%		8	7		13	2	
18	8.66%		15	20		25	10	
10	7.51%		11	13		22	2	
6	7.54%		19	11		29	1	
4	7.05%		3	4		7	0	
4	6.63%		13	4		17	0	
10	7.70%		5	11		11	5	
1	8.50%		12	2		14	0	
3	7.17%		11	5		15	1	
0	.00%		6	0		6	0	
3	8.05%		6	3		9	0	
15	7.20%		26	16		39	3	
1	6.00%		3	1		4	0	
2	7.25%		10	1		11	0	
1	7.00%		41	5		45	1	
8	7.16%		29	8		35	2	
13	6.92%		28	12		37	3	
10	6.95%		38	10		47	1	
32	6.99%		136	35		164	7	

Appendix A

Table 1

Unfunded Vested Benefits (UVB) by FASB Interest Rate—1981 and 1980

FASB Interest Assumption	Total Number of Companies		Number of Companies with UVB=0		Number of Companies with UVB		Total UVB ($ millions)	
	1981	1980	1981	1980	1981	1980	1981	1980
4.50– 4.99	–	2	–	1	–	1	0	3.8
5.00– 5.49	9	14	4	6	5	8	45.4	115.9
5.50– 5.99	14	24	12	14	2	10	6.1	395.1
6.00– 6.49	68	113	50	69	18	44	758.1	1,567.2
6.50– 6.99	46	63	32	39	14	24	443.2	788.5
7.00– 7.49	97	108	72	70	25	38	1,152.0	2,596.4
7.50– 7.99	60	50	46	33	14	17	735.6	924.3
8.00– 8.49	95	87	69	59	26	28	1,789.8	5,720.9
8.50– 8.99	44	25	34	21	10	4	724.8	220.8
9.00– 9.49	45	17	34	10	11	7	574.2	329.8
9.50– 9.99	11	2	10	1	1	1	37.5	80.1
10.00–10.99	23	11	14	5	9	6	3,408.4	661.7
11.00–11.99	1	–	1	–	–	–	0	0
12.00–12.99	2	2	2	2	–	–	0	0
13.00–13.99	1	–	1	–	–	–	0	0
14.00–14.99	2	–	2	–	–	–	0	0

Table 2

Periods of Amortization for Past Service Liabilities

Years of Amortization	Number of Companies
10	23
15	9
16	1
18	1
20	27
10 to 20	4
15 to 20	4
25	18
10 to 25	2
15 to 25	1
20 to 25	1
30	219
10 to 30	23
14 to 30	1
15 to 30	5
20 to 30	6
25 to 30	6
35	4
10 to 35	1
27 to 35	1
38	1
40	85
10 to 40	17
15 to 40	11
20 to 40	6
25 to 40	1
30 to 40	32
35 to 40	1

Appendix B

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

Abbott Laboratories
ACF Industries
Agway
Air Products & Chemicals
Akzona
Allegheny International
Allied
Allis-Chalmers
Alumax
Aluminum Co. of America
AM International
AMAX
Amerada Hess
American Bakeries
American Brands
American Can
American Cyanamid
American Greetings
American Hoist & Derrick
American Home Products
American Motors
American Petrofina
American Standard
AMF
AMP
Ampco-Pittsburgh
Amstar
Amsted Industries
Anchor Hocking
Anderson Clayton
Anheuser-Busch
Arcata
Archer-Daniels-Midland
Armco
Armstrong Rubber
Armstrong World Industries
Arnet
Arvin Industries
Asarco
Ashland Oil
Atlantic Richfield
Avery International
Avon Products
Baker International
Ball
Bally Manufacturing
Bangor Punta
Barnes Group
Bausch & Lomb
Baxter Travenol Laboratories
Beatrice Foods
Beckman Instruments
Becton Dickinson
Belco Petroleum
Bell & Howell
Bemis
Bendix
Bethlehem Steel
Big Three Industries
Black & Decker Manufacturing
Blue Bell
Boeing
Boise Cascade
Borden
Borg-Warner
Briggs & Stratton
Bristol-Myers
Brockway Glass
Brown Group
Brown-Forman Distillers
Bucyrus-Erie
Burlington Industries
Burroughs
Cabot
Cameron Iron Works
Campbell Soup
Campbell Taggart
Capital Cities Communications
Carnation
Carpenter Technology
Caterpillar Tractor
CBI Industries
Ceco
Celanese
Central Soya
CertainTeed
Cessna Aircraft
CF Industries
Champion International
Champion Spark Plug
Charter
Chesebrough-Pond's
Chicago Pneumatic
Chromalloy American
Chrysler
Cincinnati Milacron
Cities Service
Clark Equipment
Clorox
Cluett, Peabody
Coastal
Coca-Cola
Colgate-Palmolive
Collins & Aikman
Colt Industries
Combustion Engineering
Commonwealth Oil Refining
ConAgra
Cone Mills
Consolidated Foods
Consolidated Papers
Continental Group
Control Data
Cooper Industries
Coors (Adolph)
Copperweld
Corning Glass Works
CPC International
Crane
Crown Central Petroleum
Crown Cork & Seal
Crown Zellerbach
Cummins Engine
Cyclops
Dan River
Dana
Dart & Kraft
Data General
Dayco
Dean Foods
Deere
Dennison Manufacturing
Dexter
Diamond International
Diamond Shamrock
Digital Equipment
Donnelly (R.R.) & Sons
Dorchester Gas
Dorsey
Dover
Dow Chemical
Dow Corning
Dow Jones
DPF
Dresser Industries
DuPont (E.I) de Nemours
E-Systems
Eagle-Picher Industries
Eastman Kodak
Eaton
Economics Laboratory
EG&G
Emerson Electric
Emhart
Engelhard
Envirotech
Esmark
Ethyl
Evans Products
Ex-Cell-O
Exxon
Fairchild Industries
Farmers Union Central Exchange
Farmland Industries
Federal
Federal Paper Board
Federal-Mogul
Ferro
Fieldcrest Mills
Figgie International
Firestone Tire & Rubber
FMC
Ford Motor
Foster (L.B.)
Foster Wheeler
Foxboro
Frederick & Herrud
Freeport-McMoran
Fruehauf
GAF
Gannett
Gates Learjet
GATX
General Cinema
General Dynamics

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

General Electric
General Foods
General Instrument
General Mills
General Motors
General Signal
General Tire & Rubber
Genesco
Georgia-Pacific
Geosource
Gerber Products
Getty Oil
Gifford-Hill
Gillette
Goodrich (B.F.)
Goodyear Tire & Rubber
Gould
Grace (W.R.)
Great Northern Nekoosa
Greyhound
Grumman
Gulf & Western Industries
Gulf Oil
Gulf Resources & Chemical
Hammermill Paper
Handy & Harman
Harcourt Brace Jovanovich
Harnischfeger
Harsco
Hart Schaffner & Marx
Heileman (G.) Brewing
Heinz (H.J.)
Hercules
Hershey Foods
Heublein
Hewlett-Packard
Honeywell
Hoover
Hoover Universal
Hormel (Geo. A.)
Hughes Tool
Hyster
Ideal Basic Industries
Idle Wild Foods
Illinois Tool Works
Ingersoll-Rand
Inland Steel
Insilco
Interco
Interlake
International Business Machines
International Harvester
International Minerals & Chemical
International Multifoods
International Paper
International Telephone & Telegraph
James River Corp. of Va.
Johnson & Johnson
Johnson Controls
Joy Manufacturing
Kaiser Aluminum & Chemical
Kaiser Steel
Kane-Miller
Kellogg
Kellwood
Kerr Glass Manufacturing
Kerr-McGee
Kimberly-Clark
Knight-Ridder Newspapers
Knudsen
Koppers
Lear Siegler
Levi Strauss
Libbey-Owens-Ford
Lilly (Eli)
Lipton (Thomas J.)
Litton Industries
Lockheed
Lone Star Industries
Louisiana Land & Exploration
Louisiana-Pacific
Lowenstein (M.)
LTV
Lubrizol
Macmillan
Magic Chef
Manville
MAPCO
Marathon Oil
Marmon Group
Martin Marietta
Maryland Cup
Masco
Masonite
Mattel
McCormick
McDermott
McDonnell Douglas
McGraw-Edison
McGraw-Hill
Mead
Merck
Mid-America Dairymen
Midland-Ross
Minnesota Mining & Manufacturing
Mitchell Energy & Development
Mobil
Mohasco
Monsanto
Moore McCormack Resources
Morton-Norwich Products
Motorola
Murphy Oil
Nabisco
Nalco Chemical
Nashua
National Can
National Distillers & Chemical
National Gypsum
National Service Industries
National Steel
Natomas
NCR
New York Times
Newmont Mining
NL Industries
North American Philips
Northrop
Northwest Industries
Northwestern Steel & Wire
Norton
Norton Simon
NVF
Oak Industries
Occidental Petroleum
Ogden
Olin
Outboard Marine
Owens-Corning Fiberglas
Owens-Illinois
Pabst Brewing
Paccar
Pacific Resources
Palm Beach
Parker-Hannifin
Peabody International
Peavey
Penn Central
Pennwalt
Pennzoil
PepsiCo
Perkin-Elmer
Pfizer
Phelps Dodge
Philip Morris
Phillips Petroleum
Pillsbury
Pitney-Bowes
Polaroid
Porter (H.K.)
Potlatch
PPG Industries
Purex Industries
Quaker Oats
Quaker State Oil Refining
Ralston Purina
Rath Packing
Raychem
Raytheon
RCA
Reichhold Chemicals
Republic Steel
Research-Cottrell
Revere Copper & Brass
Revlon
Rexnord
Reynolds (R.J.) Industries
Reynolds Metals
Richardson-Vicks
Riegel Textile
Robertson (H.H.)
Rockwell International

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 500 Industrials

Rohm & Haas
Rohr Industries
Savannah Foods Industries
Schering-Plough
Schlitz (Jos.) Brewing
SCM
Scott & Fetzer
Scott Paper
Scovill
Searle (G.D.)
Shaklee
Shell Oil
Sheller-Globe
Sherwin-Williams
Signal Companies
Singer
Smith (A.O.)
Smith International
SmithKline
Sonoco Products
Sperry
Springs Mills
Square D
Squibb
St. Regis Paper
Staley (A.E.) Manufacturing
Standard Oil (Ind.)
Standard Oil (Ohio)
Standard Oil of California
Stanley Works
Stauffer Chemical
Sterling Drug
Stevens (J.P.)
Stokely-Van Camp
Sun
Sun Chemical
Sundstrand
Superior Oil
Sybron
Tecumseh Products
Tektronix
Teledyne
Tenneco
Texaco
Texas Instruments
Textron
Thiokol
Time Inc.
Times Mirror
Timken
Todd Shipyards
Tosco
Trane
Trinity Industries
TRW
Tyler
U.S. Gypsum
U.S. Industries
U.S. Steel
Union Camp
Union Carbide
Union Oil of California
Uniroyal
United Brands
United Merchants & Manufacturers
United Technologies
Universal Leaf Tobacco
Upjohn
VF
Vulcan Materials
Walter (Jim)
Warnaco
Warner Communications
Warner-Lambert
Washington Post
West Point-Pepperell
Western Electric
Westinghouse Electric
Westmoreland Coal
Westvaco
Weyerhaeuser
Wheelabrator-Frye
Wheeling-Pittsburgh Steel
Whirlpool
White Consolidated Industries
Whittaker
Willamette Industries
Williams Companies
Witco Chemical
Wrigley (Wm. Jr.)
Wyman-Gordon
Xerox
Zenith

From the Fortune 50 Largest Commercial Banking Companies

AmeriTrust Corp.
BancOhio Corp.
Bank of New York Co.
BankAmerica Corp.
Bankers Trust New York Corp.
Barnett Banks of Florida
Centerre Bancorp
Chase Manhattan Corp.
Chemical New York Corp.
Citicorp
Continental Illinois Corp.
Crocker National Corp.
DetroitBank Corp.
European American Bancorp.
First Bank System
First Chicago Corp.
First City Bancorp. of Texas
First Interstate Bancorp.
First National Boston Corp.
First Pennsylvania Corp.
First Union Corp.
Interfirst Corp.
Irving Bank Corp.
Manufacturers Hanover Corp.
Marine Midland Banks
Mellon National Corp.
Mercantile Texas Corp.
Michigan National Corp.
Morgan (J.P.)
NBD Bancorp
NCNB Corp.
National Bank of North America
National City Corp.
Northern Trust Corp.
Northwest Bancorp.
Philadelphia National Corp.
Rainier Bancorp.
Republic New York Corp.
Republic of Texas Corp.
Security Pacific Corp.
Southest Banking Corp.
Texas Commerce Bancshares
Union Bank
U.S. Bancorp.
Valley National Bank of Arizona
Wachovia Corp.
Wells Fargo & Co.

Appendix B (Continued)

Alphabetical List of Corporations Whose Annual Reports Were Surveyed.

From the Fortune 50 Largest Retailing Companies

ARA Services
Albertson's
Allied Stores
American Stores
Associated Dry Goods
Dayton Hudson
Dillon Companies
Eckerd (Jack)
Federated Department Stores
First National Supermarkets
Fisher Foods
Giant Food
Grand Union
Great Atlantic & Pacific Tea
K Mart
Kroger
Lucky Stores
Macy (R.H.)
Marshall Field
May Department Stores
Melville
Mercantile Stores
Pantry Pride
Penney (J.C.)
Pneumo
Rapid-American
Revco D.S.
Safeway Stores
SCOA Industries
Sears Roebuck
Service Merchandise
Stop & Shop Companies
Thrifty
U.S. Shoe
Waldbaum
Walgreen
Woolworth (F.W.)
Zayre

From the Fortune 50 Largest Utilities

Allegheny Power System
American Electric Power
American Natural Resources
American Telephone & Telegraph
Arizona Public Service
Baltimore Gas & Electric
Carolina Power & Light
Central & South West
Cleveland Electric Illuminating
Columbia Gas System
Consolidated Edison
Consolidated Natural Gas
Consumers Power
Continental Telephone
Detroit Edison
Duke Power
El Paso
Enserch
Florida Power & Light
General Public Utilities
General Telephone & Electronics
Gulf States Utilities
Houston Industries
Illinois Power
Internorth
Long Island Lighting
Middle South Utilities
Niagara Mohawk Power
Northeast Utilities
Northern Indiana Public Service
Northern States Power
Ohio Edison
Pacific Gas & Electric
Pacific Lighting
Pacific Power & Light
Panhandle Eastern Pipe Line
Pennsylvania Power & Light
Philadelphia Electric
Public Service Co. of Indiana
Public Service Electric & Gas
Sonat
Southern California Edison
Southern Company
Texas Eastern Corp.
Texas Utilities
Transco Companies
Union Electric
Virginia Electric & Power

From the Fortune 50 Largest Transportation Companies

Alexander & Baldwin
Allied Van Lines
American Airlines
Arkansas Best
Braniff International
Burlington Northern
CSX
Chicago & Northwestern Transportation
Consolidated Freightways
Continental Air Lines
Delta Air Lines
Eastern Air Lines
Emery Air Freight
Federal Express
Frontier Airlines
Leaseway Transportation
McLean Trucking
Missouri Pacific
Norfolk & Western Ry.
Northwest Airlines
Ozark Airlines
PSA
Pan American World Airways
Piedmont Aviation
RLC Corp.
Republic Airlines
Rio Grande Industries
Roadway Express
Santa Fe Industries
Southern Pacific
Southern Ry.
Telecom
Tiger International
Trans World Corp.
UAL
United Parcel Service
U.S. Air
United Van Lines
Western Air Lines
Yellow Freight System

About Employee Benefit Consulting at Johnson & Higgins

Employee benefit plans continue to grow: in the range of benefits and in complexity. These plans—because they reflect voluntary action, negotiation, regulation or legislation, such as ERISA, ADEA, TEFRA—are increasingly important to employers. Benefit plans represent a substantial percentage—typically 30%-45%—of total payroll and are essential to good employee relations.

The Johnson & Higgins approach to benefit consulting is comprehensive and includes all aspects of:

- design
- financing
- marketing
- communication
- monitoring
- research

Our consultants and actuaries are cross-trained in pensions and group insurance to achieve a degree of involvment and knowledge in employee benefit plans that is unmatched. About 700 full-time staff members provide the vital professional, technical and support services for our clients.

To maintain a leading position in our field, we are constantly developing new techniques, such as our:

- Benefit Adequacy Index to measure the employees' proper spendable income levels for pensions.
- Multi-Assumption Projection System to obtain a fix on future benefit program costs.
- Cost Containment techniques for application to medical and disability programs.
- Preretirement Counseling and Attitude Surveys to help in guiding employees.
- Variable Benefits programs to meet the changing needs of employers and their employees.

* * * * *

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